

## GAv is UK's Major Supplier for "World's Biggest Aerospace Contract" Our Systems will go on New **ADVANCED TACTICAL FIGHTER**

GEC Avionics and its associated company Lear Astronics will play a major part in the supply of equipment for the next generation of US stealth fighter aircraft, the Advanced Tactical Fighter, ATF.

Following a three-month test programme flown by two prototype aircraft at Edwards AFB, California late last year, the winning Lockheed F-22 has been selected by the Pentagon to provide some 650 ATFs for the US Air Force over the next two decades. The £38 billion expected cost makes this the largest-ever aerospace project.

GAv is the only UK company to play such a major role in this prestigious programme, which will give the USAF air superiority into the 21st century.

The F-22 will be developed and built by a consortium which includes Lockheed, Boeing, and General Dynamics. GAv's £300m share comprises the head-up display from ADD; the pilot's control stick, which provides the main link between the pilot and the aircraft's control systems, from CACD; and the Lear Astronics/CACD contribution, jointly with General Dynamics, to develop the integrated Vehicle Management System (VMS). This is an integrated processor suite which incorporates the fly-by-wire flight control system and all the F-22's flight critical and semi flight critical systems such as hydraulics, brakes, and environmental control. GAv Inc in Atlanta will be closely involved as the programme goes ahead.

Together with the recently awarded contract for the Boeing 777 fly-by-wire system, the potential value of the business won in the USA exceeds £500 million over 15 years. Initially, this includes £60-70 million for the fighter work and more than £45m for the 777.

Managing Director Brian Tucker says "The ATF deal places us on both the next



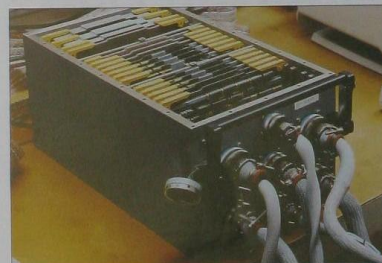
The 'stealthy' radar-resistant aerodynamic form is clearly shown in this view of the F-22 prototype.



CACD's side stick controller on the YF-22A follows some 10 years of experience starting with the Experimental Aircraft Programme.



ADD's HUD represents the state of the art in wide angle HUDs and uses advanced holographic technology, similar to that also being developed for EFA.



Lear Astronics' fly-by-wire computer is vital to the aircraft's agility and manoeuvrability.

## 777 Contract is Formally Signed

An historic moment for GEC Avionics is captured as Ron Howard and Philip Condit, Executive Vice-President and General Manager, 777 Division, Boeing Commercial Airplane Group, sign the contract for the Primary Flight Control Computer to be used on the new wide-body passenger aircraft. Behind them is Rick Josephson, Procurement Manager, Avionics and Flight Systems.

Also from GAv at the ceremony in Seattle were Brian Tucker, MD, Andy Hills (DM) and Malcolm Earl (777 Programme Manager) from FCD, together with Peter Clarke of our office in Redmond near Seattle.

After the ceremony, the full scale mock-up of the 350-seater 777 was visited, together with the simulator where everyone tried their hand at 'flying' the new aircraft.

The 777 contract secures GAv's place in the growing fly-by-wire commercial aircraft market. Over five years of development work in FCD, with support from CACD, MASD, MCD and TSRL, can now progress into the building of systems for aircraft likely to be a major success in the years to come.

Launch orders have already been received by Boeing from United Airlines and All Nippon Airways.



## Bill Alexander Retires

The retirement of Bill Alexander after over 36 years as one of our main 'guiding stars' has been recorded in a separate extra issue circulated mainly within GAv's UK workforce.

To complete the story, here is a picture of Bill with his wife Edith, who has been so supportive and interested in a great many of our activities, appearing among us on many occasions over the years.

Our best wishes go to them both for a long and happy retirement.



**STOP PRESS** — Friday 10th May saw the maiden and second flights of the Canadair Regional Jet (RJ) with its state of the art 'fly-by-wire' spoiler control system supplied by FCD. See page 3.

**INSIDE**

Page 2 and 3 Company News and People: 4 and 5 Your Scanner Appeal Fund-raising: 6 Long Service Awards and Retirements: 7 Sports and Events, Clubhouse Forthcoming Attractions.

[www.rochesteravionicarchives.co.uk](http://www.rochesteravionicarchives.co.uk)

# TSRL'S OPEN DAY

In March TSRL held its first annual 'open day' since its move to the main site, during which it presented both itself and its work to GEC management and to the other divisions. The result of the move is increased visibility, which ensures both that the Laboratory is giving value for money, and that new ideas are made more available to the Product Divisions either to solve existing problems or for possible

new products. The open day took the form of short lectures on various subjects followed by demonstrations.

Among the more unusual ones were Virtual World and Active Noise Control. Virtual World has been shown on TV being used in a new generation of arcade games, where the 'player' wears a helmet and goggles which produce a 3-D artificial world in which he is immersed. We are studying the

less exciting but much more exacting application of creating a view of the cockpit and outside world for a pilot who is flying blind.

Active Noise Control is a method of reducing the noise heard by cancelling it with other 'opposite' noise. We are studying the application of this technique to the passenger cabin of the new generation of turbo-prop aircraft.

## Another Quality Award

In March 25 Monitoring and Control Division was presented with the "McDonnell Douglas Preferred Supplier Quality Team Award" for the fourth consecutive year. Only seven companies out of 700 European and British suppliers

have been awarded PSQT status.

In presenting the award Mr Tom Etheridge, on behalf of McDonnell Douglas, stated that to maintain the award for four years shows the commitment by GEC Avionics in

Quality Assurance and he believed this would continue well into the future.

*Peter Hewlett, MCD's Divisional Manager, receives the Preferred Quality Award from Mr Tom Etheridge of McDonnell Douglas.*

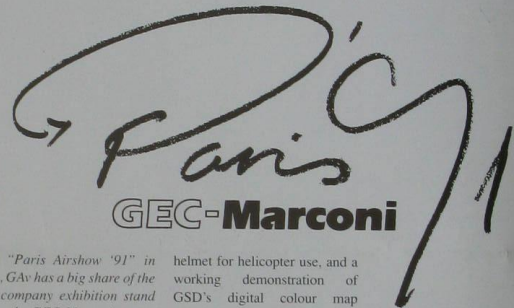


# MCD go to sea

GAV has received a contract valued at approximately £860,000 from Racal Radar Defence Systems Ltd for design, development and production of a power supply and battery support unit (PSU/BSU) for the Command and Control system of the UK Royal Navy Type 23 Frigate.

The order includes production of over 300 of these rugged, highly reliable units, with deliveries commencing in May 1991.

**The purpose of the unit is automatically to provide uninterrupted power supply to the system in the event of ship's mains failure, reverting when the normal power is restored.**



At "Paris Airshow '91" in June, GAV has a big share of the four-company exhibition stand under the GEC-Marconi name; the others are GEC Sensors, GEC-Plessey Avionics, and Marconi Systems Technology (a division of Marconi Underwater Systems Ltd). Also, GEC-Marconi Electronic Systems Corp., GEC's largest defence contractor in the US, will be represented.

GAV exhibits will include a model of ADD's latest "total mission capable" binocular

helmet for helicopter use, and a working demonstration of GSD's digital colour map currently in production for the Harrier GR7 night attack aircraft. GSD's Total Terrain Avionics (T<sup>2</sup>A) integrated covert navigation system will be featured, also the CACD/GSD SPARTAN terrain referenced navigation / terrain following system selected for the UK Tornado IDS variant. In the Flight Controls field, the fly-by-wire and computer systems chosen for EFA, Boeing 777,

Airbus fleets and Canadair's Regional Jet are on show.

ISD's Miniature Standard Central Air Data Computer, and MASD's acoustic and tactical processors for anti-submarine helicopters, including the Royal Navy Merlin project, complete an impressive line-up of GAV systems confirming our world leadership in avionics systems.

## HOW IT WORKS

Last month's item about Fly-by-wire has prompted a series of articles about the products of our Divisions, and how they actually work and what they do. The picture of a soldier using Ground Owl suggested that the first of these should be...

### NIGHT VISION GOGGLES

The response of our eyes, sometimes referred to as Eye-balls Mk I, is best in the green/yellow portion of the daylight vision spectrum and is poor at night for two reasons. First, the light levels are very low even for the dark-adapted eye, and second, most of the night sky radiance, other than sunlight

reflected from the moon and planets, and starlight, is in the near infra-red (IR) region where the eye has no response. That's why night looks rather black.

Night vision devices overcome the problem because they are much more sensitive to low levels of radiation than the eye and are also sensitive in the near IR. They gather radiation that is invisible to the eye and convert it to a green/yellow image which the eye can see.

#### The Basics

Night vision goggles consist of two monoculars supported on a cross-slide assembly (which normally incorporates the battery power supply).

The Night Vision Goggle monocular has a camera-like objective lens to gather the available radiation, an image intensifier tube to amplify the radiation and turn it into visible light, and an eyepiece/magnifier focused on the tube output. The objective lens inverts the image and a 180° fibre optic output twister in the tube again inverts it to allow the user to see an erect image scaled 1:1 (unity magnification) with the outside world scene.

The principle of operation is that the night sky radiation is gathered by the objective lens and focused in the intensifier tube onto a photocathode. The photocathode releases electrons which are current amplified by a microchannel plate and which

then strike a phosphor screen creating visible light.

The microchannel plate is a thin secondary emission current amplifier which consists of a parallel array of hollow glass cylinders about 1mm long and 10 microns in diameter. The inside walls of the cylinders are coated with a secondary emitting material which, when excited by the electrons, greatly amplifies the current flow by a cascading action.

This amplification can be anything up to 50,000 times the input.

#### New Versions

The latest Generation 3 (GEN 3) tubes differ from Generation 2 (GEN 2) tubes mainly in the type of photocathode

used and its sensitivity. While our eyes see light at wavelengths of around 400 to 700 nanometres (spectrum violet to red), GEN 2 tubes have alkali photocathodes with response from 350 to 900 nanometres. GEN 3 tubes have more expensive gallium arsenide photocathodes which are more sensitive and respond best in the 600 to 900 nanometre range, which is where night sky radiation is concentrated. This allows GEN 3 systems to operate at lower light levels than GEN 2 and they are more easily made compatible with aircraft cockpit lighting. However, on all but the darkest nights there is very little obvious difference between GEN 2 and GEN 3 systems, which accounts for the

continued production of GEN 2 tubes for night vision applications.

The development of Night Vision products has progressed greatly over recent years and therefore forms a significant part of our pilot's helmet philosophy. Our continued research in this area offers improved mission capabilities to the world's military.

Suggestions for items for this series will be welcomed - as well as actual contributions. Subject to the usual confidentiality restraints, we will do our best to let you know 'How it Works'. ED

## GAv AGAIN RECEIVES FIT for WORK AWARD



At a Department of Employment ceremony at Airport Works, hosted by GAv on 1st May, the company was presented with its third "Fit for Work" award. GAv is the only company in the South East region to have received the award on three occasions.

The Award recognises "good practice among organisations in recruiting, employing, and training people with disabilities".

The Guest of Honour was Her Majesty's Deputy Lord Lieutenant of Kent, The Right Hon. Countess Mountbatten of Burma. Other distinguished guests included local dignitaries and senior industrialists, D of E officials and local MPs Dame Peggy Fenner DBE, and Jim Couchman.

Representatives from each division were invited to the presentation and to the subsequent lunch in the Lounge Bar.

Robin Carver MBE, Chairman of the Kent Committee for the Employment of Disabled Persons, welcomed

the guests and explained the background to the Awards. Brian Tucker in his speech pointed out that the Fit for Work Award is regarded by GAv as among the very highest honours which can be made to any company. It is a tribute to a great range of people's abilities and to the team spirit in which one employee is willing to help another to carry out his work successfully.

Countess Mountbatten presented the Fit for Work Award plaque to Gavin MacDonald, ex apprentice now Production Technician in GSD. Ray Foster, Checker in WES, received the Certificate and Julie Starling (nee Stott), Welfare Officer, received the commemorative emblem.

The Countess, herself no stranger to the frustrations of life in a wheelchair following the bomb tragedy which caused Lord Mountbatten's death, commented how much the attitude of people towards disability is now changing. The Award, she said, is a tribute to the whole "family" of people at

*Seen here after the presentation, Gavin MacDonald, Ray Foster, Countess Mountbatten of Burma, Julie Starling and Brian Tucker.*

work and reflects employees' commitment to colleagues who suffer from any form of disability.

Julie Starling, on behalf of all fellow employees, thanked the Countess for her congratulations for the award and her kind remarks.

Dover District Council, who were represented by Councillor Mrs A.R. Purnell, were also presented with a Fit for Work Certificate at the ceremony.

### "Caught in the Gulf"

With great regret, we have to postpone the continuation of John Chappell's story, owing to pressure on space in this issue. Ed.

## OFFICE OPENS IN HOUSTON

As our expansion into the Oil and Gas industry continues, GAv has opened an office in Houston, Texas. It will provide engineering, technical, and marketing services for MCD's Subsea Control Systems business in the Western Region, which is defined as North and South America, South-east Asia, and Australia.

Our strong entry into the US Gulf of Mexico market with the

contract for Exxon's Zinc subsea system was described in the last issue. The new GEC Avionics Inc. Houston office, together with the company's existing Atlanta facility, will play a major role in the Zinc project and in our future activities in the region. The move will give GEC Avionics, and the Industry, increased capacity in subsea control system products in an area where there is growing demand.

## CANADAIR'S REGIONAL JET IS FLYING

The maiden flight of the new RJ is a first for Canadair and for GAv, with the advanced fly-by-wire technology used for the Spoiler Electronic Control Unit (SECU) on the 50-seat aircraft.

Since the contract was awarded last year, FCD has worked to extremely tight timescales. A full team of engineers has been located at Bombardier Inc., the aircraft manufacturer's site in Montreal, completing an extensive programme of rig and aircraft tests.

# THE GEC PLAN & SELECTED BENEFIT SCHEME

The earlier people start making adequate financial provisions, the better their quality of life will be when they retire. Being financially secure allows people to enjoy the freedom retirement brings and helps them pursue their own leisure activities without worries.

Because of tax relief and Company support, the Company Pension remains the most popular form of provision for retirement and you can improve your chances of enjoying your retirement if you've planned your finances well in advance.

**Selected Benefit Scheme - Boosting your Pension Power**  
Take advantage of a tax efficient means of boosting your pension by saving through the Selected Benefit Scheme. This complements The GEC Plan by providing a facility for extra pension and/or death benefits by the payment of additional voluntary contributions.

As a member of the GEC Plan you contribute 3% of your earnings. You may contribute a further 12% of earnings to the Selected Benefit Scheme. There is tax relief on all contributions. Contributions for retirement benefits may be reviewed on the 1st of any month but Death in Service contributions may only be amended on a member's renewal date (annually).

**Finding out what your Pension will be**

In the last ten years or so leading up to retirement you should start thinking about where your retirement income is going to come from and whether it's going to be enough to live on.

**Company Pension**

Pension benefit statements are received annually and give a forecast of benefits through to state retirement age, both in the form of a pension and as a tax free lump sum and reduced pension.

### State Pension

It is possible also to obtain a forecast of your state pension benefits well in advance.

Contact Personnel or the Department of Social Security for Form BR19 - fill it in and send it to the Retirement Pension Forecasting and Advice Unit at the address given on the form.

The information you will receive will give details of your basic state pension, and of state earnings related entitlement and preserved benefits in the graduated pension scheme.

Further details of the GEC Plan and Selected Benefit Scheme are available from the Personnel Department.

## ADD Team Wins The Haskett Trophy.

The winner of the 1991 Haskett Trophy for Engineering Achievement has been judged to be "Powered Holographic Elements for use in Head Up Displays", ADD's team entry.

Richard Howard (Project Leader), Joanne Kelsey and Jonathan Freeman (Senior Development Engineers) and Roy Townsend (Senior Design Engineer) share the £2000 prize which with the trophy will be presented during the summer. The holo-

graphic technology is a vital feature of the EFA and ATF HUDs.

From an extremely high standard of entries, the work of APD's Paul Schwarzenberger (Senior Section Leader, Laser Group) and Russ Leybourne (Manager, Mechanical Design Group) on the "High Repetition Rate Pulsed CO<sub>2</sub> Laser" was judged particularly outstanding, receiving a Meritorious Runners Up prize of £500 to be shared at Borehamwood.

## Recent Appointments

Over the last few weeks a number of appointments have been announced across the company.

In the USA, Fred White is now Vice President US Marketing, responsible for the management and operational control of all GAv corporate marketing personnel based in the US. Fred has been managing the Los Angeles office for some years.

Tim Taylor is Manager Transport Aircraft Equipment, with the increasing importance of the 'civil' aircraft market-

place, he will particularly be working closely with ADD in the technical development and marketing of HUDs for transport aircraft.

Here at Rochester, TSRL sees the appointment of Dr Peter Carrington, previously Technical Manager of MASD, as Deputy Divisional Manager. Also, Malcolm Moulton is Business Development Manager, Jayne Bryant is Chief Engineer, and Keith Mitchell is Chief Scientist. Don Price is Research Consultant.

Following the early retirement of Ken Boardman, John France is now Manager of CQD.

Peter Jones has moved to CACD to take up the post of Marketing Manager.

'Charlie' Bass returns to Rochester as Production Manager of ADD. Succeeding him at Nailsea, Chris Coveney is now Production Manager of MCD.

And at Borehamwood, Gillian Sandys has been appointed Commercial Manager of APD.

**GEC Avionics News**  
**Editor: Francis Latta**  
 (0634) 844400 Ex 3852  
**Asst. Editor: Iain Hunter**  
 Ex 3974  
 Logistic and Customer Services Division  
 Publications, Airport Works,  
 Rochester, Kent ME1 2XX.  
**Liaison Officers**  
 Dave Lucas, ADD  
 Sid Golding, CACD/FCD  
 Phyllis Ellis, CMS  
 Maurice Sparham, CQD  
 Clive Baker, GSD  
 Mick Thomas, LCSD  
 Hannah Twitchen, MASD  
 Jean Underwood, MCD  
 Lionel Budge, SESD  
 Bob Ellwood, TSRL  
 Barry Wallington, Hopewell Drive  
 Jean Wilson, APD  
 Borehamwood  
 Lynne Bates, GAv Inc,  
 Atlanta USA.

# The Scanner Appeal

*how the money came in...*

... and is still coming in. When the original £25,000 target was passed nine months early at Easter, the momentum was such that even as this is written £33,000 is well behind us.

The generosity of individuals and groups is boundless. So much money and time and effort deserves gratitude difficult to express; no complete record can or should mention everybody involved, but here is a collection of just some of the events in aid of the Appeal. To every one at GAv who has taken part, THANK YOU. And if you are not mentioned on this page, this means you especially.

But even this account of the Appeal is 'out of date'; keep it up - and tell GAv News.



Here are some of the fancy dressers at the Mad Hatter's Ball, which filled the teatop with £350. Jean Underwood and Loretta Springer of MCD who organised the event, say that special thanks are due to Alf for his excellent disco, Trevor and Hazel Morgan for the buffet, the canteen bar staff for their efforts above and beyond the call of duty, and to the helpers who decorated the ball so beautifully. The event was so successful that MCD are now planning a Hallowe'en Fancy Dress Ball on November 1st.



At the poolside are: Back (L to R) Mike Smith (FCD), Carl Musson (GSD), Sarah Chambers, Pat Betts, Dave Betts (CACD).

Front (L to R) Kevin Patrickson (ADD), Neil Rattray (GSD), Vicki Harvey, Trevor Harvey (GAv), Dave Sheridan (SESD), Richard Watson (MASD), Ray Newman (LCSD).

The story of the Sub-Aqua Club's £1500 Cross-Channel Swim is on Page 7. Here in the water are (clockwise from top) Andy Bulford (MASD), Robin McQueen, Gayle Brixey (MASD), and Peter Woolmer (ADD).



"Well worth the sacrifice" thinks Malcolm Moulton as he receives 'heartly congratulations' from Jan Moss on his new configuration (see last issue). Malcolm thanks everyone who helped him raise £350.



## Climax of the Scanner Draw

Chris Smith, 2nd Year Apprentice, had a considerable shock when he was urgently called back from Mid Kent College at lunchtime one Friday in April. But he did wonder a little when he was told to bring his Medway Scanner Appeal company Draw ticket with him.

In the Canteen, Brian Tucker was pulling winning numbers out of the drum, and Chris discovered that one of the two Draw tickets he had bought now entitled him to the first prize, two return tickets to New York donated by Virgin Airlines.

Speechless, Chris managed to help Brian Tucker hand over a £28,000 cheque to the Appeal Secretary Alison O'Connell. The money was the astonishing total received by that day 'towards' the company's target of £25,000 for 1991 - but nine months early.



In all, 104 prizes donated by employees, local companies, sporting teams and clubs were drawn; nearly £5000 worth of tickets had been sold.

Chris, who is now at Hopewell Drive and has spent time in ADD, CQD, and CACD, has generously decided to offer his tickets to his parents. He particularly wants to thank the individuals who offered him spending money for the trip to New York.

AND NOW ... See Back Page for news of the Car Draw.

Brian Tucker shows the winning ticket stub, while Alison O'Connell and Chris Smith proudly display the grand Appeal total so far. Brian said "I have been overwhelmed by the enthusiasm, resourcefulness and generosity of all the people who work at GEC Avionics."

## A Random Sample

Here's a completely random sample of some of your contributions, perhaps typical of the hundreds of others which have no record.

- CSD Barn Dance £500
- SESD Disco £400
- Regular sale of "goodies" £620
- WES Easter Raffle £123
- WES Punks Collection £107
- MCD Lottery £250
- FCD "Wine and Wisdom" £386
- LCSD Disco, "Ghastly Ties", Raffle etc £850
- ISD Pontoon £585
- Carol Foster WES Sponsored Slim £147
- CMS collections to date £500
- Ballroom Dance Section £128
- CACD collections to date £1150
- Security Bus Stops and loose change £37

- ISD "Wine and Wisdom" Brain-ache £248
- Accounts Dept Pontoon and Competition £40
- Jenny Venables FCD Sponsored Ramble £120
- Karaoke Evening £600
- Bob Kemlo GSD ran the London Marathon in 4 hours £215.
- ADD to end April £1478
- CMS Trivia Quiz £125
- SESD Dance £400
- LCSD Sponsored Slim; Colin Hayman, Chris Scott and Jim Cowell £535
- and the Company Draw raised £4784.



*The Surgery held Raffles, bringing in totals of £539 and £702. Seen here (with a prize donated by a bung-over patient ??) are Karen Edmonds, Dr Redman, Andrea Pickett, Paula Lawrance, Vicky Oakley and Linda Ali, clockwise.*

## Easter Bunnies collect £680

MCD's bevy of beautiful bunnies toured the Divisions just before Easter collecting money for the Scanner Appeal in return for mini chocolate eggs. On 27th March, Gwen Abnett from Cost & Budget led the first expedition to LCSD to collect donations from her old colleagues there. The rest of the Company was visited on the 28th, starting with the Towers in the morning. In the afternoon, the bunnies split into smaller groups to try and cover more areas.

The faces of most of the bunnies were hidden to protect the innocent, but we can reveal their names here: Loretta Springer, Jean Underwood, Sarah Glover, Michelle Perfect, Jackie Doorne, Tracy Paffett and Allison Clare. The team included rotating substitutes, as the furry outfits were so hot to wear and the job rather exhausting, although very enjoyable. Some of the expressions on people's faces were a sight to remember, when they suddenly saw a bunch of large pink rabbits invading their offices and workshops! One group of bunnies accidentally interrupted a presentation speech in MASD and were given a spontaneous round of



*GSD started a run of successful "Wine and Wisdom" evenings, run by Nick Walklett. The second, in March, well overtook the first by bringing in £605. Judging by some of the thoughtful expressions here, it wasn't all easy. FCD are also into these evenings; they have already thought up £386 at one event and plan to do even better in June.*



## WHY THE SCANNER APPEAL?

The value of a "CAT Scanner" in the early and accurate diagnosis of many medical conditions, particularly cancer, is now well established. The opportunity to acquire one for Medway Health District was lost on the day the battle was

lost to retain our Radiotherapy Centre in the Medway Towns. To secure this vital piece of equipment the Medway Cancer Scanner Appeal Fund was set up in March 1990 with the aim of raising £1 million.

A variety of medical conditions can be diagnosed by a Computerised Axial Tomography Scanner. These include cancer, head injury, internal bleeding, slipped disc and infection. In many instances a CAT Scan can avoid needless surgery.

With a Medway Scanner, a great number of patients could be investigated, nearly 3,000 a year, which would meet fully all the needs of our Health District. Patients who could not tolerate a long ambulance journey, for example those from the Intensive Care Unit attached to life support machines, and acutely ill post operative patients, could be investigated safely and at an early stage of the disease. Acute emergencies, particularly head injuries, could have an immediate diagnosis.

### What it will do

The Medway Hospital rents a mobile scanner once a fortnight, thus giving only limited access and resulting in long waiting lists. The emergencies in the intervening period are transferred either to London or to the local private hospital for their investigation.

A site has been provided for the CAT Scanner by the Health Authority within the Medway Hospital. This is in the heart of the hospital, in close proximity to the X-Ray Department, Intensive Care Unit, Accident and Emergency Department and the Wards. Provisional work on the design has already begun.

applause! We hope that Peter Carrington recovered from the shock eventually, and wish him good luck in his new job.

**A staggering total of over £680 was collected, even though many people had already donated to their own Divisional collections earlier. Many thanks to everyone who gave so generously, and apologies to the few areas we didn't manage to reach by the end of the day.** LS

*Colin Morris and Lynn Harrington of CS masterminded the Barn Dance with "Hoe Down" in April. Around 180 people entered into the spirit of the evening like those in this picture, and £500 was raised.*



# Thankyou

*Dr Mohan Velamati, Chairman of the Medway Cancer Scanner Appeal and Director of Radiology at Medway Hospital has written:*

"Thank you for giving me the opportunity to formally thank the staff at Rochester in your internal newspaper. It has been a magnificent effort considering the short space of time in which it was achieved. It clearly demonstrates that you can achieve far greater than what seems possible at the outset, when people set their mind to it. I also gather that the fund

raising efforts so far have been most enjoyable and that many have derived a great deal of pleasure and satisfaction in the process. I and my colleagues on the Appeal Committee are most grateful for their generosity.

We are now gradually reaching the £200,000 mark but clearly there is a long way to go before we reach our target. What we need is another £300,000 in the next nine months or so, so that we can proceed with the construction of the building and installation of the equipment. Any delay at

this stage will throw the project off course by the adverse effects of inflation.

The scanning services in our district are now reaching a critical point where the burden is becoming far too great, both for the patient and for those of us who are trying to provide it.

**I therefore hope that you will continue to give your support and bring the day nearer when we can have our own Body Scanner for the people of Medway".**

SEE BACK PAGE FOR NEWS OF THE GRAND CAR DRAW.

[www.rochesteravionicarchives.co.uk](http://www.rochesteravionicarchives.co.uk)

# Adventure of a Lifetime for Paul

Last spring, Paul Everson of Applied Physics Division, Borehamwood was one of the people from 17 GEC Companies chosen at a highly competitive weekend at Dunchurch Management College, to join the GEC Young Employees' Expedition which went to Nepal in September.

Paul recalls that following a summer of 'development training' of personal skills and of planning and fund-raising, the team finally met at Gatwick for a 15-hour flight to start the 'real' part of the project. This was to be a 5-week trek to conduct glacier research 19,000 feet up in the Himalayas.

"During the first two days in Katmandu we roamed the streets absorbing the fascinating sights, sounds and culture of this remarkable city. A reconnaissance in June had contacted a trekking agency. When we arrived a lot of work was already done, but a tonne of equipment and food still had to be bought, sorted and packed.

On the third day, 30 or so porters, two Nepalese guides, the 21 of us (18 young employees, a doctor, a science adviser and the expedition adviser), set off in two fully laden buses to the roadhead at the town of Jiri. The journey gave us our first distant views of the breathtaking beauty and isolation of the distant snow-capped Himalayas. At dawn the next day our trek began, for four weeks our lives were to be carried on our backs and the only transport was by foot.

Our legs ached, our shoulders were bruised. The porters bounded along barefoot carrying loads twice as big as ours. From the wet, lush lowlands of the first few days where we shared our camps with leeches, the climate became dryer, colder and harsher as we walked higher.

After two weeks we left the last village behind. We had swapped porters for yaks and headed out into the snowy wilderness. Another two days, setting up lower and advance base camps along the way, saw us onto a small glacier at 18,500 feet. Part of the team started the science



Nearly a tonne of food to be sorted and weighed.

work, the rest ferrying supplies from the lower camps. We had come to conduct 'glaciochemical research', taking ice cores, snow and air samples, to be analysed for traces of contamination. The results will lead to a better understanding of the processes and chemistry of the atmosphere.

A second, higher glacier at 19,000 feet was chosen as the drill site. Eight of the team spent two days digging a pit 2 metres deep. From the bottom of this pit we drilled down into the ice for samples. The atmosphere was thin, the wind biting. We worked in one-hour shifts, for the work was exhausting. Our only stove would not light, and we worked frantically to get it started. We had run out of water, and resorted to eating snow to quench our thirsts. The stove was repaired, and the evening's hot meal was welcome relief from the cold.

Every single member of the team did some work on the lower glacier, a remarkable achievement. The science work was a success.

*Past the last village, into the snowy wilderness.*



Nearly a tonne of food to be sorted and weighed.

All too soon, we were packing up and heading homewards, showers and flushing toilets beckoning. We arrived back in Katmandu fitter and perhaps a little wiser, our adventure nearly over. In the last days, we explored the city again, it seemed different now that we understood it.

Although the expedition was almost over, memories would always remain. Women bringing their children to be treated by our

## Obituaries

### Colin Fielding-Clarke

The staff of Applied Physics Division were saddened to hear of the sudden death of Colin in February.

Colin, a Valve Technician on the vacuum tube programme, had worked in the division for 17 years. He was a well-read man, with a passion for modern history.

From APD

### Fred Stockton

Fred Stockton, the Quality Assurance Manager of Guidance Systems Division who has died aged 51, was a friend to all of us and was equally well respected by his staff, his colleagues in the division and the company and by all of our customers and suppliers with whom he dealt.

Fred was born and educated in Keighley and joined the RAF as an apprentice from school. After 14 years service in the RAF he joined the company in the QA Depart-

ment of IN Division in 1969. He rapidly became a popular member of the division as well as being recognised as capable and conscientious to the extent that within 3 years he became a Senior QA Engineer, and Deputy QA Manager of the division early in 1974. In 1979 he was appointed QA Manager of Gyro Division and in 1987 he became QA Manager of GSD.

Fred was a homelover and a keen home improvement man. He leaves a wife Sybil, married daughter Dawn and grandson, and son Gary.

From GSD

ment of IN Division in 1969. He rapidly became a popular member of the division as well as being recognised as capable and conscientious to the extent that within 3 years he became a Senior QA Engineer, and Deputy QA Manager of the division early in 1974. In 1979 he was appointed QA Manager of Gyro Division and in 1987 he became QA Manager of GSD.

Fred was a homelover and a keen home improvement man. He leaves a wife Sybil, married daughter Dawn and grandson, and son Gary.

From GSD

## 25 Years Service



Quality Technician **Elwyn Underwood's** first day with the company called upon his trade experience of the theory and practice of carpentry, when he had to be rescued through the roof from behind a Locked Door. After that he settled into AS&R/LCSD working, at first in the clean room, on a wide range of electronic equipment.



**Lorna McPake** started her 25 years as Sales Secretary in the former MACD and was then in DAD, forerunner of ADD, where she worked for Ken Warren, now an MP. In 1970 Lorna became Secretary to Jack Pateman, and since 1977 she has been Travel Manager in charge of the office which is now dealing with around 2000 travelling arrangements in a year. Lorna has also often been a key member of the company's teams at major events and exhibitions such as Farnborough.



**Jean Wilson**, Secretary to the Divisional Manager of Applied Physics Division, has also worked for the four previous DMS during her 25 years in the same division.



**Geoff Woodley**, a Principal Engineer now in FCD with the 777 team, has until very recently worked on military programmes. Following his Student Apprenticeship when he studied at Bradford University, Geoff was in MACD, old FCD and CACD, lately with several years on Tornado. He was also a member of the FCD/CACD team which won the Haskett Trophy in 1989.

## Retirements

**Laurie Owen** has retired from Applied Physics Division. Although with APD for only the past 2 years, he had over 33 years service, particularly as Chief Draughtsman for the Radar divisions of the former Marconi - Elliott Avionic Systems (MEASL) at Borehamwood.

**Harry Jones** of ISD's Data Management Group spent his 24 years in Transport Aircraft Controls, then in IND(GSD) and MASD, before moving again in 1988 to ISD where he was a Logistics Engineer.

In AS&RD/LCSD, **Scott (Jock) Ganson** was looking for a rest after 30 years in the Fleet Air Arm and RAF, much of it in Transport Command. Carrying VIPs such as HRH The Prince of Wales and Harold Wilson was an ideal preparation for him to join the division in 1970 - his 21 years were in fact very busy in Tech. Pubs, where he became Senior Editor.

**Ken Oliver**, Reprographic Administrator in LCSD, and ex Royal Marine and TA man, was started to be the only 64-year old to receive call-up papers for the Gulf. More peacefully, he has spent 15 years at GAv as the last stint of a long career in the printing and packaging industry.

**Charlie Tanton**, Leading Hand in ADD Model Shop, has taken early retirement after nearly 20 years in ADD - before which he was in Fuze Division.

Most of **Alan Boorman's** 18 years were in IND/GSD Library; he has retired as Chief Librarian. Earlier, following an apprenticeship, he had spent many years in the music and entertainment world and as a book-maker.

**Frank White** joined ADD when he left the Royal Navy but soon moved to IND, in 1969. For many of his 23 years here Frank has been a Project Controller.

**John Hayhow's** 30 years have been in Electrical Inspection and Planning areas, firstly in IND and then in CACD.

**Alex Hill** has retired as Sales Manager in MCD, previously PSD where he had moved in 1978. The early part of his 27 years here was spent in ATED, where he became Chief Engineer. Now Alex is 'starting again' as he has decided to go to Kent University to study history subjects.

## Wedding Bells

Friends and colleagues gathered in the Personnel Department recently to wish Julie Stott every happiness in her marriage to Richard Starling on 13 April.

Julie who has been Welfare Officer for 5 years, was presented with a number of gifts by Tony Williams, Personnel Manager.

## GEC AVIONICS (ROCHESTER) LONG SERVICE ASSOCIATION

The Eighth Annual General Meeting and Strawberry Tea will be held on FRIDAY 21st JUNE at 7.00pm in the Lounge Bar, Main Canteen.

## Sub-Aqua Club's Channel Swim

This year the GEC Avionics Falcon Divers decided to combine their annual Open Day at the Social Club pool with a Cancer Scanner money raising event. So while the normal 'Try Dives', demonstrations and static exhibits occupied one side of the pool, on the other side relays of divers attempted to swim the equivalent of the English Channel underwater, a total of 21 miles or 1500 lengths. This feat was achieved

in about 9 hours and raised £1500 for the Scanner Appeal.

A most enjoyable day was had by all, and many new members were recruited to the club. Special thanks are also due to the wives and girlfriends of members, who provided invaluable assistance on the day.

*A popular feature of the Open day was the Try Dives, here with Dave Betts of CACD introducing young and not-so-young to life under water.*



# Swimming Change of Name for the Social Club

**DON'T FORGET** - The Swimming Section are holding a Sponsored Swim in aid of the Medway Scanner Appeal during June. Check notice boards and circulars for the details.

## Golf Section

The first day outing this year was at Sene Valley near Folkestone, where our captain Ron Mutter (GSD) just happened to take first prize with 76 points. Our immediate past captain Peter Fowler (CACD) was runner-up (pipping Ernie Worcester on a count-back) with 71. All will be pleased to know that handicaps have been revised!

Now with over 100 members (including our first-ever lady member - Welcome!) we look forward to another successful year ahead.

Forthcoming events: Tri-site match (north) 3 June; Walmer 27 June; Tri-site match (south) 9 July; Broome Park 27 August; North Foreland 4 October; Broome Park 30 December.

Enquiries for membership to Mike Broome (GSD Engineering), by post please.

MB

*The 1990 season finished in March with the Annual Dinner Dance and Prizegiving at the GAV Club at Hoo, a most enjoyable evening. Our President Alf Harrison came along, and is seen here banding the Alf Harrison Cup to Alan Ward (ADD), for being the Singles Knockout winner in 1990.*

At the 9th Annual General Meeting of the GAV/BP Kent Club, a proposal to amend the Constitution put forward by the Management Committee was accepted by a large majority. The motion was to change the name of the club to the GEC AVIONICS CLUB.

Peter Bird, newly appointed Secretary, explained that following the purchase of the club 9 years ago, a very considerable sum of money has been put into it; it was now felt that the name change should be made in thanks to the company for

everything it has done. The rights of existing BP members will not be affected.

The new Vice-chairman Jim Collins had commented earlier, that over the nine years subsidies to the club from the company have amounted to £1.2 million, and the recently completed improvements have cost £3/4million.

The work caused disruption and loss of income, but the improved and enlarged facilities are now being used more and more.

Tributes were paid to the many years of service for BP

and GAV, of the recently retired General Secretary Maurice Finch; to Jim Collins, now Vice-chairman, for his long service both at the old Featherby Road club and lately as Social Secretary; and to Bill Alexander at his retirement as Club President for the tremendous amount that he has done for the club and its members.

Brian Tucker now takes over as President and following the election of four new GAV members, with one each for BP and Fishers (all marked \*), the Management Committee is now as follows:

- Chairman:  
John Bradley -  
Director of Personnel  
Vice-Chairman:  
Jim Collins  
Members:  
Rod Cole - CQD  
\* Keith Jones - c/o WES  
Hugh McArthur -  
Training Dept (Hopewell Drive)  
\* Cyril Moffett -  
FCD Production  
\* Roy Newman -  
LCSD Production & Repair  
Jim Troy - CACD Admin  
\* Roy Wade - Security  
\* Dennis Killingbeck - BP  
Terence Oxenham - BP  
\* Robert Bruce - Fishers  
Appointed Members:  
Treasurer:  
Mark Perry - GAV Accounts  
Asst Treasurer:  
Valerie Squires - GAV Accounts  
Secretary:  
Peter Bird -  
Clubhouse - Medway 251492  
Short Code 6009

## GEC AVIONICS CLUB Forthcoming ATTRACTIONS

Saturday 15th June  
**Country & Western Evening**  
with  
"Johnny Young"  
7.45 - 11.45

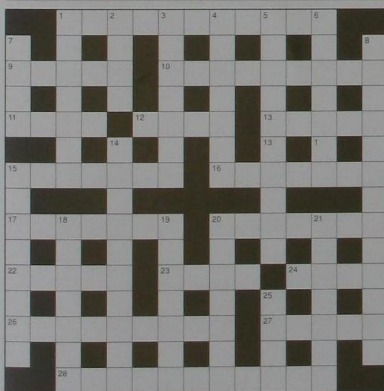
Saturday 22nd June  
Saturday 20th July  
**MUSIC in the BAR**

Saturday 6th July  
**KARAOKE Evening**  
8pm

Saturday 27th July  
**Parlour Derby**

**NOTICE**  
Catering at the Hoo Clubhouse is now undertaken by  
**THYME CATERERS**

## Crossword No. 104 (For amusement only)



### ACROSS

- Pop song writer's mecca. (3,3,5)
- A window projection, college. (5)
- To forfeit honour, prestige. (4,5)
- Oxford River. (4)
- Bill of fare. (4)
- Without a settled place. (5)
- Tapering flag. (7)
- Like the stars at night a'gleaming. (7)
- Do this in the mind. (7)
- Collects. (7)
- To please the palate. (5)
- Cheeky youngster. (4)
- The angler's quarry. (4)
- Recital of connected events. (9)

- The actor's unscripted word. (5)
- Controlling impulses of sensation. (5,6)

### DOWN

- What the tutor gives. (7)
- Girl's name in short, ask Charles. (4)
- Sickness. (7)
- An attack, physical or verbal. (7)
- Holder of certificate from examining body. (10)
- Eastern lady's veil. (7)
- Surely 'tis done with water! (2,3,8)
- Not the ideal succession, could smell. (4,4,5)

- Light coloured egoism, especially of ladies. (6,4)
- Out it goes! (3,4)
- The male's communication signal. (4,3)
- Large stately building maybe. (7)
- Grain prepared for brewing. (4)

### Solution to crossword No. 103

#### ACROSS

- Smell; 4. Cannibal; 10. Inform; 11. Boat Shed; 13. Likeness; 14. Range; 16. Gang; 17. Eleven; 21. Bassett; 22. Siso; 26. Eland; 27. Clockwork; 29. Radiator; 30. Strove; 31. Hammered; 32. Tezby.

#### DOWN

- Mafeking; 3. Larynx; 5. Albe; 6. Notaries; 7. Behind; 8. Ladder; 9. Tiltage; 12. Average; 15. Lecture; 18. Mantrake; 19. Time Bomb; 20. Holy See; 23. Hearth; 24. Tandem; 25. Scythe; 28. Mode.

Produced by  
Logistic and Customer  
Services Division,  
Publications  
GAV Rochester.

*The views and opinions expressed by contributors are not necessarily those of the Editor or Company. Any such opinions or comments are those of the contributor alone and are printed solely as a matter of interest.*

Photographs taken by the staff photographers will be acknowledged by their initials  
Alan Keats  
Ian Douglas.

Printed by Buckland Press Limited, Dover.

# Central Charity Fund

helps Local Care Scheme



The Rochester Crossroads Care Attendant Scheme was started in 1981 to provide a relief service for people who care for relatives who are sick,

disabled or handicapped. Looking after someone who requires constant attention means it can be very difficult to have a break, even for a couple of hours to go shopping, attend a medical appointment or just to take a much needed rest.

The Central Charity Fund has made a donation to the Scheme; in the picture are Dinah Taylor (Welfare Assistant), Doreen Miller the Scheme Co-ordinator, and Jenny Lamont, Fund-raising Co-ordinator.

## For Sale

Complete set (10 Volumes) of Marshall Cavendish "On the Road". Perfect condition in Binders. Offers over £30.

Bids, in aid of the Scanner Appeal, to Harry Staff, Ex 3674.

The Crossroads Care Attendant is someone who will come to your home to look after the sick or disabled person for an agreed period of time, on a regular basis if needed. The service is provided free of charge, so the success of the scheme depends on fundraising and charitable donations.

If you know anyone who could benefit from this service in the Rochester/Cuxton/Halling/Isle of Grain area, please telephone Mrs. Doreen Miller, Scheme Co-ordinator, on Medway 716238 for further information.



## Blood Count is up: 545 Units

The Blood Transfusion Service wishes to thank all concerned for their generous and continued support. This was quite an increase on the previous visit and another valuable contribution to the blood bank.

The next visit will be on 30th September for one week.

Arrangements for the big event at the Club House and Sports Field are well in hand, and details and application forms will be circulated through Divisional Admin Officers and Team Captains. Make sure that you return your entries by the dates which will be notified.

The Programme covers the six main events for the Champion of Champions Trophy, with the Prizegiving at the end of the day. For the children's races, prizes will be given out after each event. The GEC Avionics Brass Band will give a concert, and for Refreshments, coffee, tea and squash will be available free of charge. The children will get a free ice cream in exchange for a ticket, and the Bar will be open throughout the day.

GEC Avionics Management hopes that all members of our extended family will enjoy this Family Sports Day - 1991.



GEC AVIONICS LTD  
Scanner Appeal



TARGET - £25,000

DONATIONS AT  
14th May  
**£33,560**

MEDWAY FUND  
Has Reached  
£188,307

# YOU COULD WIN THIS CAR!

## SUMMER DRAW

in Aid of  
The Medway Scanner Appeal

### FIRST PRIZE

**VAUXHALL GLI.6  
4-DOOR SALOON**  
worth £13,300

(Car supplied by Greens of Rainham)

### TICKETS £1 EACH

Available to all GAv employees based in the UK.

Tickets on sale by Scanner Appeal Committee representatives and Divisional Admin Officers.

### DRAW TO TAKE PLACE IN EARLY AUGUST

Many other exciting Prizes including

- Day Trip to France
- Day Trip to Holland
- BSM Driving Lessons
- Go-kart Driving
- Glider Flight



[www.rochesteravionicarchives.co.uk](http://www.rochesteravionicarchives.co.uk)