

RAF MANSTON VISITED BY THE GERMAN AIR FORCE

They said it couldn't be done! The sceptics, and the cynics. They said there's no way you'll be able to organise it in time. I knew different. I knew we had the enthusiasm, the determination to succeed - if only to prove them wrong! I knew we had the power!

It was mid-June, and we were making final preparations to install a full 35 degree Helmet Mounted Display and Head Tracking System onto a German Tornado for a 6 month Flight Trial out of Manching, Germany.

Part of the preparation included a "Cockpit Survey and Mapping" exercise where GMAv engineers take readings from sensors placed inside the cockpit to ensure that our dc magnetic Head Tracking System, when installed, will operate at optimum accuracy.



Someone jokingly suggested that, to save time, maybe the Tornado could be flown into Rochester. But we chose RAF Manston, a fully equipped operational airbase, which is a lot closer than Manching. The question was; how on earth do you go about getting a £20 million military aircraft into an airbase, when you don't know the procedure? The answer is; make a few phone calls and ask around,

Manoeuvring the access platform into position.

someone's bound to know. Three weeks, countless faxes and phone calls later, we were climbing over our very own Tornado.

The whole event lasted three days and ran like clockwork.

The Officers, NCOs and Staff at RAF Manston were splendid, not only pitching in with great enthusiasm and energy with our engineers but also making the aircrew very welcome.

Thanks must also go to the MoD and RAF Strike Command for authorising the event, and to the staff of DSGR who organised everything from the vehicles to the white overalls.

Kevin Reed - DSGR

Duke Moir and Tony Barton installing the cockpit Mapping Fixture.



Commander Angerer wearing the 40° Helmet Mounted Display

£3m Export Order for Night Vision Equipment

Sensors Division in Basildon has won a major export order - valued in excess of £3m - for long range target detection and identification systems. The order, placed by Fokker Aircraft BV, is to equip Fokker 50 Maritime Enforcer Mk2 aircraft with GEC-Marconi Avionics' Multi-role Turret System (MRT-S) for maritime patrol and search and rescue operations.

The multi-role turret uses a miniature, rugged thermal imaging sensor with a zoom telescope to detect and identify targets at night and in low visibility conditions. Fully automatically controlled, the sensor produces a TV-like high resolution image and its unique TED detector, cooled by an operationally proven split Stirling-cycle cooling system, gives the extreme thermal sensitivity essential in the high humidity of maritime environments.

A sophisticated automatic target tracking system enables targets to be constantly monitored, whilst data is passed to the host aircraft via a MIL-STD-1553 databus. The turret housing the sensor is lightweight, gyro-stabilised and can be steered manually, or automatically slaved to a search radar.

The particular qualities of the multi-role turret, its small size and weight and its simple electrical and mechanical interfaces suit it ideally to military and surveillance roles for both fixed wing aircraft and helicopters.

GMAv Wins European Business Award

GEC-Marconi Avionics has been selected for the award of European Business of the Year by the City of Rochester.

The award is in recognition of both the Company's position as the leading avionics equipment supplier for the Eurofighter 2000 aircraft and its involvement, as a partner and working associate, with all major aerospace firms on the Continent, on programmes such as Tomado, the Tiger helicopter and the new airborne radar joint venture with Thomson of France.

A trophy to mark the award was presented by the Mayor of Rochester Upon Medway, Councillor R Cox, to Tom Benson representing GMAv's Managing Director, at a ceremony at the City's European Food and Drink Fair on August 27th.

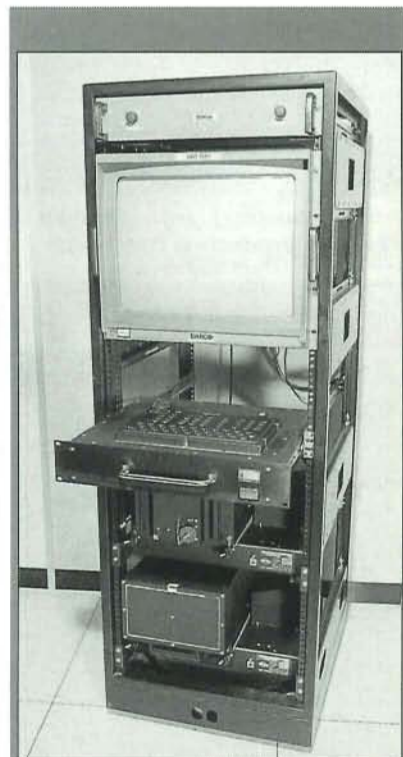
ENHANCED SUBMARINE DETECTION SYSTEMS FOR THE ROYAL SWEDISH NAVY

GMAv has been awarded a contract to supply acoustic processing systems for subsea detection by the Royal Swedish Navy (RSWN). The new system is an enhanced version of a system already in service with the RSWN, and will enable the RSWN to stay ahead of advances in technology which have reduced the acoustic signature of submarines and other underwater threats, by offering improved data processing over a broader bandwidth of sound.

The contract involves supplying new equipment and upgrading the current equipment, to the enhanced standard. It also includes a complete logistics support package including spares, test equipment, documentation and installation support.

The development and production of airborne ASW (anti-submarine warfare) systems represents one of GEC-Marconi Avionics' most important business areas. The AQS 900 series of acoustic processors, developed by GMAv, has been supplied to the UK MoD and many other countries worldwide. The AQS 901 equips the RAF Nimrod and the Royal Australian Air Force P-3C Orion aircraft. The lightweight AQS 902 and 920 series systems are in service with the Royal Navy and many foreign navies whilst the latest AQS 903 system will equip the Royal Navy's next generation of ASW helicopters, the Merlin.

Technological developments in the 14 years since the first system (AQS 901) was delivered to the Royal Air Force allow current systems to offer eight times the processing power of the 901 in a system 1/8th of the size. Latest advances include 'intelligent' systems which help the operator sift through the mass of information gathered by the current systems.



GMAv's acoustic processing system for subsea detection by the Royal Swedish Navy.

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
Marketing Services Officer
B450 Business Development
Group, Sensors Division
Basildon

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**NEXT COPY
DATE - Wednesday
October 27th**

VIDEO STARS

GEC - Marconi Avionics now has a corporate video thanks to the efforts of staff in Edinburgh.

Video Producer Brian Godfrey was in charge of the technical aspects of the work.

Brian said: "I collected tapes from all the Company's Divisions and ended up with around 25 hours of video cassettes to view. There was an intense period of editing in order to condense it to a seven - and - a - half minute promotional tape to complement the script. Thanks to a team effort, the video was finished in time for the Paris

Air Show where it had its first public showing."

The video is narrated by Scottish actor Michael Elder and the impressive three-dimensional graphics on the tape were the work of Mirage, an Edinburgh television production company.

As the video was well received at the Paris Air Show, Brian is now working with Don Short of Rochester's Audio-Visual facility, and Glyn Morgan from Basildon, to prepare another with brand new film stock from all of GMAV's Divisions. This will be available next year.



Brian (standing) with Douglas Gray of the Mirage television production company.

GEC-MARCONI AVIONICS ACTUATORS ENABLE QUIET REVERSE-THRUST

GEC-Marconi Avionics is supplying actuators and control equipment for the thrust reverser on the hush-kit being provided by Quiet Nacelle for the Rolls-Royce Spey engines on the Gulfstream II and III business jet.

The GMAV equipment from the Company's Power Systems Division based in Titchfield is an important element in this hush-kit installation which enables

the aircraft to comply with the FAA's latest 'Stage 3' noise reduction requirement for all commercial aircraft operating in the USA from 1st January 1995.

The system is powered by compressor-delivery air which is fed via selector-sequencing valves to the twin pneumatic rams. These, in turn, operate the thrust reverser clamshell doors.

MAJOR ORDER WON FOR ANTI SUBMARINE WARFARE SYSTEMS

GEC-Marconi Avionics has won a multi-million pound contract from a Middle Eastern nation for the supply of Dipping Sonar systems for Sea King helicopters.

The systems, designated AQS928G/2069, are based on the successful and proven AQS928G/DS system currently in Squadron service in Royal Navy Sea King helicopters.

In addition to providing the AQS928G/2069 systems, GMAV will also supply a logistics package which includes spares, test equipment, operational and maintenance training, and installation support.

The AQS928G/2069 system combines the powerful 2069 dipping sonar subsystem with the AQS 920 series acoustic processor to provide a flexible and reliable system capable of detecting, localising and tracking submarines even in the difficult acoustic conditions which can exist in tropical waters.



A hovering Sea King dips the sonar equipment into the sea.

Scottish Microelectronics Group Achieves Dual Approval Status

Radar Systems Division's Microelectronics Group at Crewe Toll reached a significant milestone recently with the dual award of British and European standards recognitions for custom thick film hybrid manufacture. Jim Forbes, Group Manager, explained: "The award makes us the only organisation in the entire GEC Group to gain the European standards recognition. We are also only the second organisation in the whole UK to gain both the European and British awards."

Known as 'capability approvals', the awards will boost the Group's profile and present it with an important sales and marketing tool.

The Cenelec Electronics Components Committee (CECC), and the British Standards (BS) Body have certified that the Microelectronics Group can release products to the highest levels available in both CECC 63200 or BS 9450.

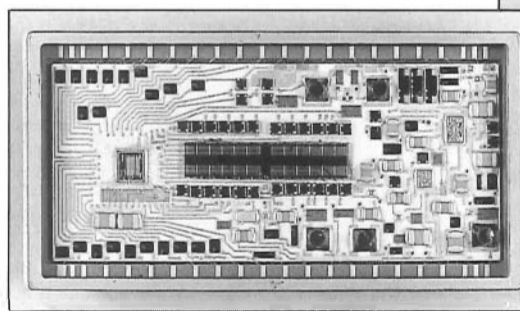
This is vital for the Group's work on the radar for Eurofighter 2000 and in many other fields.

Jim said, "Our hybrids can be found in anything from radars to laser range-finders, medical imaging equipment, inertial navigation systems and more.

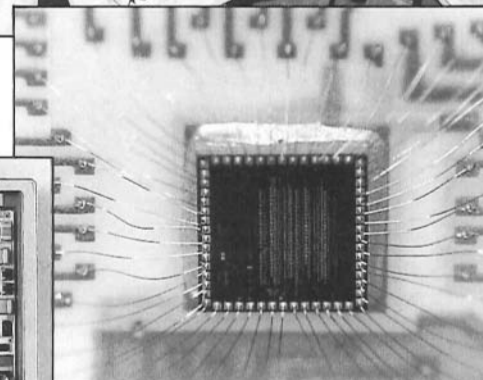
"These approvals mean that our design and manufacturing



Microelectronics Group staff with the 'capability approvals' awards.



Assembly complete! The ASIC can now be viewed 'in situ' in a thick film hybrid assembly.



A typical 'add on' component (application specific integrated circuit or ASIC), showing details of fine gold wire interconnection and density. The wire is only 0.001 inch thick.

standards are acceptable to internationally recognised certification bodies. Even if our customers have no requirement for BS or CECC certified products they have

the knowledge that their product has been manufactured in such an environment."

The Microelectronics Group now aims to capitalise on its standards successes and look

outside the Company for external customers.

To find out more about the Microelectronics Group, contact Jim Forbes at Crewe Toll on Ext. 4409.

PHOTOGRAPHIC UPDATE

MEASURING UP

An engineering company cannot survive without accurate tools. If staff cannot rely on the items they use to assemble and test the Company's products, then those products will be useless to the customer.

The Calibration and Test Centres in GEC-Marconi Avionics are there to help ensure that all measuring equipment is itself measured against national standards.

The Calibration and Test Centres based at Support Division's facilities at Edinburgh and Rochester have an extensive measurement capability which encompasses the fields of electrical, mechanical and physical measurement as well as electromagnetic compatibility testing. This article looks at the Mechanical Calibration Laboratories which can measure anything from the flatness of a surface table to the accuracy of the thread on a screw.

Malcolm Robertson, Project Leader, Metrology Services, who runs the South Gyle Laboratory in Edinburgh said: "We calibrate anything from small and rugged items like micrometers and callipers to slip gauges, surface tables and turbines." Micrometers are the vice-like items which can be found in any engineering workshop and they measure tolerances from fractions of a millimetre upwards. Slip gauges are small ceramic or metal blocks which have an amazing accuracy in length.

Malcolm said: "Slip gauges themselves can be used for calibrating other measuring tools, but we also have to calibrate the sets of slip gauges by using even more sophisticated techniques."

But how accurate are these items? Slip gauges are usually up to 4 inches long and Malcolm explains "These and other items are calibrated in a temperature and humidity controlled environment. With a steel slip gauge for example, a temperature difference of 1 degree Centigrade can cause expansion or contraction to one eleven-millionth part of an inch. This is important as the master set of slip gauges we hold have been calibrated to an accuracy of five millionths of an inch."

Small items of general purpose test equipment pass through the Laboratories at the rate of 800 to 1200 each month for calibration. The Laboratories are also responsible for special-to-type test equipment like specially built fixtures

which aid the manufacture of particular products and the more common large items such as surface tables. Malcolm said: "We have a granite surface table, 8 feet by 4 feet, the surface of which is flat to better than 12 ten-thousandths of an inch. It is used in the certification of high-accuracy special - to - type fixtures."

Other more sophisticated equipments were identified by Maurice Parsons at the Rochester facility. Maurice, who is Manager of the Standards Lab, explained: "In addition to the manual checking and noting of details we can analyse complex shapes using a computer controlled 3 dimensional co-ordinating machine. Here, the sensor can be traversed across the complex shape in all three dimensions to give a computer readout of the accuracy of its shape and size. A typical subject would be turbine blade sections."

Such examples form only part of the Laboratories' work which encompasses everything from humble hand tools, temperature and pressure sensors, torque wrenches and gauges, to the rate of flow of coolant over laser components.

John France - the Central Quality Manager at Rochester said "To comply with the requirements in contracts with the Ministry of Defence and many other customers, all our work has to be covered by procedures and results which can be traced back for years. Everything we do here at Rochester and in South Gyle is traceable to the National Physical Laboratory in London which is the custodian of UK Standards."

Malcolm added that our expertise is useful for all Divisions of GMAV and Group Companies as well as external customers. "We already do work for local engineering companies and are looking to expand our client list for the future."

The Support Division's Laboratories hold the NATO accreditation standard for measurement, AQAP6, as an integral part of AQAPI, which recognises the accuracy and traceability of their methods in calibrating equipment and tools.

From South Gyle, Gordon Clarkson, Quality Manager (Measurement), said: "The NATO standards grew out of the previous UK Ministry of Defence standards but are soon to be superseded by the International ISO 9000 series of standards. The National Measurement Accreditation Service (NAMAS) accreditations that we have for the Calibration and Test Centres overall mean that we can already meet the relevant requirements of ISO 9000/BS 5750 series standards."



Following-on from the two stories covered in VISION Issue 2 relating to the first flight of the Tornado GR4 and the Blue Vixen AMRAAM firing, the accompanying photographs have now been released.

(i) The Tornado GR4 takes off from BAe Military Aircraft Division's Warton Aerodrome in Lancashire on 29 May 1993. This is the first development aircraft in the Mid-Life Update (MLU) programme. The flight, which lasted 90 minutes, was nine weeks ahead of schedule.

(ii) A Sea Harrier FRS3, developed by British Aerospace, fitted with GMAV's new Blue Vixen Radar. Designed and produced by Radar Division, Blue Vixen is able to detect and track a low altitude target whilst flying evasive manoeuvres.

(iii) GMAV's Blue Vixen Radar will enhance the capabilities of the Sea Harrier FRS2.

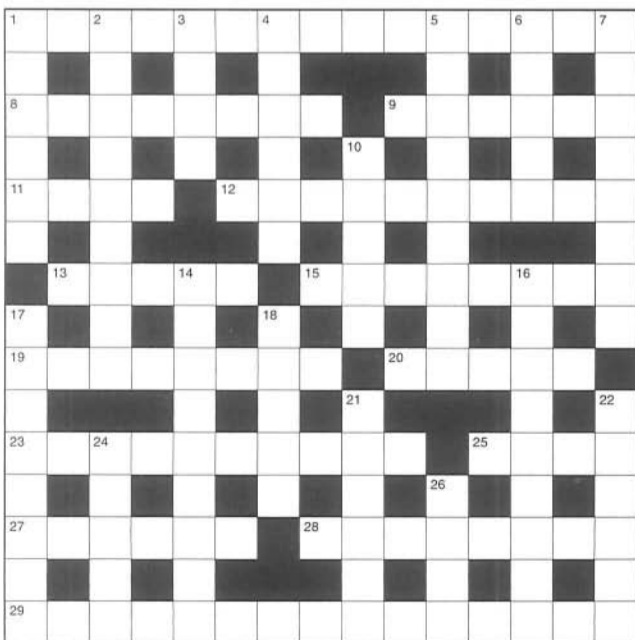


(Photos (ii) and (iii) by courtesy of BAe Defence Ltd, Military Aircraft Division)



Malcolm Robertson, right, and Eddie Hunter at work in the Mechanical Calibration Laboratory at South Gyle, Edinburgh.

Crossword No. 3 (For amusement only)



Across

1. Neither near-side nor off-side (6-2-3-4)
8. Captives for ransom (8)
9. Search deeply, like a small animal (6)
11. Holy Man of Mohammedans (4)
12. Tunes for a rainy day (5-5)
13. Clutch this in a crisis (5)
15. Stuck to the bottom of the boat (8)
19. First heard in an opera (8)
20. African lake, giving name to its country (5)
23. Ready to go, on the ball (8-2)
25. Nasty school pudding (4)

27. A heraldic dog (6)
28. Like 23, may be even more energetic (4-4)
29. To begin with, winning the race (2-3-5-5).

Down

1. Maureen's wig, made from woolly goat (6)
2. Take it all to bits (9)
3. Does not tell the truth (4)
4. Down 1 across, but not returning (3-3)
5. H's a level bet (4-4)
6. Man eating giants (6)
7. An aloof house? (8)
10. The tree of Lebanon (5)
14. Like a spud or tattie when below ground (9)

16. A country in America, not in the Spanish sun (5-4)
17. He's a romantic painter and poet (8)
18. Caught a fish? Keep it here (5)
21. Medicine with gin in it (5)
22. The sailor man (6)
24. A small piece of land (5)
26. A shout for assistance (4).

Solution to Crossword No.2

- Across**
- 1 Chicken Maryland, 8 Ruthless, 9 Acting, 11 Foul, 12 False teeth, 13 Dirty, 15 Tasmania, 19 Pinpoint, 20 Snout, 23 Nomination, 25 Lair, 27 Oddity, 28 Midnight, 29 Off the grass
- Down**
- 1 Carafe, 2 Intrusion, 3 Kilt, 4 Nassau, 5 Yachtsman, 6 Alive, 7 Dog Cheap, 10 Islay, 14 Two and two, 16 Neuralgia, 17 Open door, 18 Units, 21 Polish, 22 Truths, 24 Midge, 26 Snag.

Mr Marconi's Magic

"They flew a Kite and changed the World"

At a time when a colourful display of kites greeted visitors to Chelmsford's County Hall in Essex, a kite of special significance was forming the centrepiece to 'Mr Marconi's Magic', an exhibition in the adjacent Central Library displaying Marconi's early inventions and discoveries.

Dominating this recent exhibition was a replica of the kite used by Guglielmo Marconi in 1901 to hoist his aerial at St John's Head, Newfoundland, so that he could receive the first transatlantic radio signal. This replica was specially constructed by Taylor's Sailmakers of Maldon, Essex.

Organised as part of the Science and Industry Project by the Chelmsford Museums Service, the exhibition contained items such as an Induction Coil and a Morse Key, together with a Coherer Receiver made at Chelmsford's Hall Street Works in 1905. Interesting replicas could also be seen, such as Marconi's 1896 Beam Transmitter and Receiver - which he demonstrated on Salisbury Plain - and a Five Needle Telegraph, an early electric telegraph built by Charles Wheatstone in the 1820s. Working models were also included enabling visitors to experiment with mechanical waves - their frequency (length) and amplitude (height) - and a spark transmitter.

The concluding exhibit, 'History in the Making', contained a Company Souvenir of 1898 - a photographic 'organisation chart' depicting members of staff of the Wireless Telegraph and Signal Company; the World of Wonder Annual 1972 - open at the story of Marconi and his kite; and at its centrepiece two large wooden puppets of Marconi and his assistant George Kemp. These were



'Mr Marconi's Magic' - A view into the exhibition with the aerial kite clearly visible above. The kite played an important part in the Company's history. It was a 'Levitor', designed by Capt Baden-Powell (brother of the Scouting founder), for military reconnaissance. It had no tail and was flown on two wires to keep it steady. Storms wrecked the transmitting station in Poldhu, Cornwall and receiving station at St John's Head, but with an aerial flown from the kite Marconi received the first transatlantic radio signal in November 1901.



made by the Post Office in 1962 to commemorate the first transatlantic radio signal.

'Mr Marconi's Magic' was staged at the Library until August 14th. The display has now been installed in the Marconi Hut inside the Sandford Mill Engine House as the first in a series of displays promoting Chelmsford's telecommunications heritage.

'Waves and Wires' - Electronic telegraphy was developed in the mid-nineteenth century. Marconi's 'wireless telegraphy' was the first practical system of communication using radio waves, needing no cable and the transmitter could broadcast signals to any receiver within range. (l-r) Five Needle Telegraph; a small piece of the Atlantic Telegraph Cable (laid under the ocean by Brunel's Great Eastern, 1866) and a working model for counting waves.



'Something Old, Something New' - (l-r) Induction Coil (produced a spark for the transmitter), Morse Key (the means for coding signals) and the Coherer Receiver (detected the signal at the Receiver).



'History in the Making' - (Cr) The Company Souvenir 1898, World of Wonder Annual 1972 (on table) and Marconi and George Kemp featured as puppets.

JUST CHAMPION

The Company now boasts a bona fide British Champion in the shape of Paul Buchanan, a Senior Technical Author with South Gyle's Support Division in Edinburgh.

Earlier this summer, Paul was one of a five-man Scottish team which took part in the Home International Fly Fishing Championships on the River Wharfe in Yorkshire.

Not only did Scotland walk away with the competition overall, but Paul finished in top place and became the British River Fly Fishing Champion for 1993. The Scots occupied the top four individual places.

Paul said: "We went down to Yorkshire two days beforehand to acclimatise. It was home water for the English and their team had qualified on that stretch of river. They had some real stars from the fly fishing world and we went expecting to get absolutely hammered!"

"The fishing took place over four sessions on two separate parts of the river. Each competitor had a controller with them at all times. No fish was killed, each was measured and returned alive. 20 points were awarded per fish and 1 point per centimetre of each catch. I took 11 fish and scored approximately 400 points."

One side effect of his efforts on the day was an unexpected weight loss. Paul said: "I had on full fishing kit and waders and covered around ten miles up and down the river on the day. It was really hot and I wouldn't be surprised if I lost half a stone!"

Paul's win was big news in the angling world and reports have appeared in his local paper, the Lothian Courier, as well as in the Sunday Post and Trout Fisherman magazine.

A qualified trout fly fishing instructor, Paul spends some of his spare time teaching others the skills that won him the



British Fly Fishing Champion 1993 - Paul Buchanan of Scotland.



Championship. Recently he appeared at the Gosford Park Game Fair in East Lothian, teaching children how to cast, and he also runs a class at the local Meadowbank Sports Centre.

Now Paul is British champ, even the Lightning aircraft outside Support Division's Edinburgh site isn't safe from his rod and reel!

The Company's Fly Fishing Club in Edinburgh sets a high standard and has qualified for this year's Scottish Club Championship Finals. But new

members are welcome, both beginners and experienced fishermen and women. For more information contact Paul, who is Club Secretary, at South Gyle on Ext. 2508.

Boeing Director Visits PSD

Mr Fred Cerf, the Boeing Director of Accessories Procurement, visited Power Systems Division at Titchfield on July 15 for a senior management review of Boeing 777 products. During a tour of the site he was shown the final assembly facility where he saw the build pass off of some 737 pumps which are approaching a landmark 10,000 unit deliveries.

Pictured 1-r: John McMabon, Assembly Department Manager; Fred Cerf, Boeing and Terry Mason, Director of Marketing.



A Message from Mike Thornton, Divisional Managing Director Sensors Division, Basildon



I would like to thank all involved in the recent ISO9001 Assessment. This major milestone for Sensors Division would not have been possible without the team effort and commitment of the workforce as a whole and will hold us in good stead for the future.

In all aspects of our business Quality activities are essential in order to achieve continuous improvement and to stay ahead of our competitors. To this end it must be remembered that further visits will be made by Assessors on a regular basis, so we must now focus our attention towards continually improving on our recent achievements.

With your help and commitment we can fulfil our potential and play a leading role in the world defence and commercial markets during the years to come.

G M Thornton, Divisional Managing Director, Sensors Division

International Quality Registration for Sensors Division

In today's very competitive world markets, the majority of customers will only buy from companies complying with National/International Quality Standards. Sensors Division quality system was recently assessed and recommended for approval as compliant with the International Standard ISO9001 (1987), equivalent to BS5750 Part 1 (1987). The Division is the first in the Company to gain this Standard. Others will soon follow. The assessment was carried out by an independent registered Body, Lloyd's Register Quality Assurance (LRQA) and replaces the now expired Allied Quality Assurance Procedures (AQAP-1 and 13) previously approved by MoD. The new ISO approval has recognition in military, civil, home and export markets.

To achieve this International Standard, significant changes from the old AQAP system were introduced. The Division's Quality procedures were restructured into functional manuals with the appropriate functional heads taking ownership of the related procedures. In many

cases the procedures were supplemented by Work Instructions produced in the skill areas to reflect the finer detail of working practices. The document restructure was supported by Management Reviews at various levels that ensured the applicability and use of the new procedures as well as reviewing organisation, responsibilities, audits and resources. Procedures for effectively addressing customer complaints were introduced. Non-stop auditing plus awareness training brought the message home that the management team were committed to achieving and maintaining the high international standards required to pass the Assessment. In the true philosophy of Total Quality the responsibility and ownership became everyone's with QA staff providing a facilitating role.

As part of the Division's strategy to identify and fix weak areas, via an intense programme of reviews and audits, a team from its sister Division in Edinburgh was invited to independently 'walkthrough' Basildon's procedures and audit its practices. Based on the Edinburgh team's comments and Sensors' own refocused approach, the required improvement to the system was achieved.

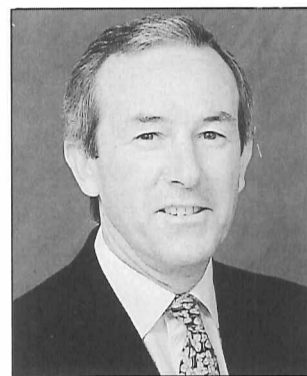
After many months of hard team effort by the entire workforce, the Division was assessed by Lloyds Register Quality Assurance during the week commencing 26th July 1993. Although the assessment took 19 man-days, only a relatively small

number of minor/ongoing non-compliances were found. The Lloyd's Assessment Team Leader, at the final review, commented on the obvious and visible commitment to Quality from all levels in the Division, and was certain that the non-compliances would be promptly addressed.

The formal presentation of the ISO9001 Certificate will take place in October.

NEW MD AT TITCHFIELD

Nick Franks has been appointed Managing Director of Power Systems Division based at Titchfield.



Nick Franks, the new MD at Titchfield.

After more than a decade of experience at senior management level in the Marconi Group, Nick Franks takes up this new appointment at a time when his depth of knowledge will assist the integration of the Power Systems Division within the new GEC-Marconi Avionics Company. He is looking forward to expanding the business and is confident this can be done by a variety of means including organic growth and acquisition when the present trading difficulties recede.

Married with one daughter, Nick Franks is a keen golfer, enjoys all sports - particularly cricket and shooting - and also enjoys traditional jazz.

The Power Systems Division, which includes Avery Hardoll, is an international market leader in systems which maximise the performance, integrity and safety of current and next generation aircraft and sea/land platform systems. The Company has been supplying systems for over 50 years.

On the civil side it supplies systems to most of the major airframe manufacturers including Airbus, Boeing and McDonnell Douglas. Power Systems also supplies equipment for many important military aircraft, such as the Harrier, Tornado, Eurofighter 2000 and C-17.

The product range includes fuel pumps, pneumatic, electrical and ground power systems, electro-mechanical actuators and sub-systems, ground refuelling and metering equipment and bulk fuel distribution.

PSD also houses Europe's premier volatile fuel test facility which can test either complete aircraft fuel systems or components over a vast range of altitudes, temperatures and fuels.



Abbey Works, Titchfield in Hampshire is home to the Power Systems Division of GMAU.

DECORATION FOR HUD DESIGNER

There was an award in the Queen's Birthday Honours List which brought deserved recognition to a long-serving member of staff at Display Systems Group, Edinburgh.

Ernie Begbie, who has been with the Company since 1958, was made a Member of the Order of the British Empire (MBE). The ceremony took place at Buckingham Palace in July and the presentation of the MBE medal was made by The Queen.

Ernie said: "My wife Ann was very excited by the whole event and enjoyed the trip. My son just complained that his graduation from Exeter University the following week was being upstaged!"

Ernie's first job with, the then, Ferranti Defence Systems in the late 1950s was radar design, but he soon became part of a five-man team which founded the

Company's Display Systems Division (DSD). DSD's first work was on the cancelled TSR 2 aircraft, V bomber and the Harrier. Ernie said: "We also went into civil business and made navigation displays for Concorde.."

DSD also produced displays for Nimrod aircraft as well as the Harrier, and later it was involved in work on an innovative combined radar/map display for the Tornado.

The next major project came when Ernie was asked to design the Company's first Head Up Display (HUD). He said: "I was confined to my own separate laboratory area and had an engineer to work with me. I was told not to reappear until the HUD was designed."

Ernie has been an integral part of the Displays Division which grew from a staff of five to 500 over a period of 25 years. To date, he has

installed displays in over more than 50 types of aircraft in over 20 countries. He now looks forward to working with colleagues in Rochester on displays technology until he retires in four years time.



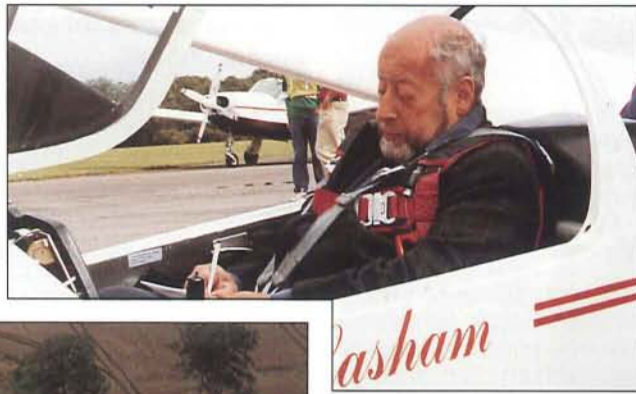
Ernie proudly displays his insignia as a Member of the British Empire (MBE).

STOP PRESS

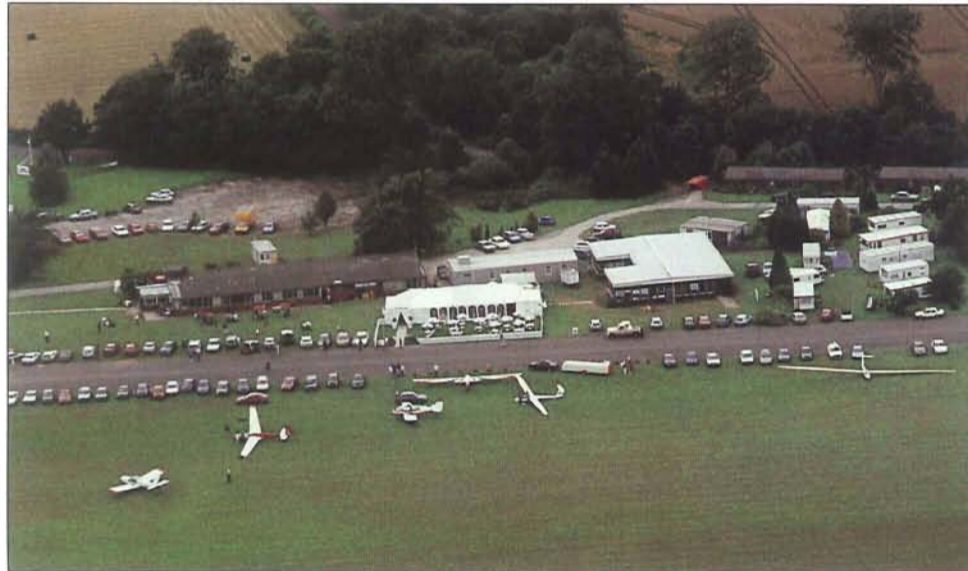
An extensive R&D programme examining next generation solid state airborne radar for fighter aircraft has been won by GEC Thomson Airborne Radar (GTAR).

Newly formed GMAv continues support for British Gliding Championships

The GEC National Gliding Championships, sponsored by GEC-Marconi Avionics, took place at Lasham Airfield in Hampshire from 24th - 31st July and again represented a unique relationship between a sponsor, a gliding society and the British Gliding Association in that all three expressed a common aim - to work together to encourage excellence in aeronautics and to promote the sport of gliding.



▲ *Sir Clement Freud, writer, broadcaster and caterer, was a guest on Sunday July 25. He is seen here preparing his article for the national press.*



▲ *An aerial view of GMAv's entertainment marquee.*

The event, which determined the UK National Champion in the Standard Class, was opened on Saturday July 24th by Sir Donald Spiers, Controller Aircraft, Ministry of Defence. As all competitors in the Standard Class flew gliders with a 15 metre wingspan, the competition was a true test of the skill of the glider pilot.

Standard Class Nationals was assured.

Throughout the week GMAv entertained between 50 and 70 customers, their wives and families each day. Guests enjoyed watching the competition gliders depart and learning about the complexities of competition flying.

It was intended that over 50 gliders would fly a competition flight on each of the nine days of the competition - weather permitting, with prizes being awarded daily and the overall winner receiving a prize during a ceremony on the closing day. However, the unseasonal weather reduced the number of flying hours on certain days.

GMAv then offered each guest the opportunity of a trial flight for themselves. The activity is usually greatly enjoyed and many guests return convinced that they are now ace fighter pilots! A minority stagger back into the



▼ *Briefing for competitors.*



▲ *Lasbam Official Jill Harmer (cr) was on hand in the marquee to answer visitors' questions on the progress of the Championships.*

The Championships were formally concluded in a ceremony on the Sunday evening - 1st August - by GMAv's MD Derek Dickinson, during which presentations were made to the winning competitors. Graham McAndrew, National Coach, was the overall winner in the Standard Class National Competition with 3916 points. Runners up were Peter Sheard (2nd - 3437 points), and Denis Campbell (3rd - 3278 points). Chris Rollings and Steve Jones finished 7th and 26th respectively.

The accompanying photographs highlight some of the week's activities.

◀ *In flight, a view across the surrounding district.*

The UK's Standard Class champion, Chris Rollings, was an active competitor, no doubt wishing to retain his position on the winners' rostrum but there was no shortage of competition to try to oust him. Among them was Steve Jones, second last year, who along with many other competitors had recently returned from the 1993 World Championships. An exciting and very competitive



▲ *Sir Donald Spiers, Controller Aircraft, MoD, opens the event.*



BIRKENSHAW DEMONSTRATION FOR AWARD WINNER

Sensors Division's thermal imaging equipment for firefighters has been given its first public demonstration at West Yorkshire's Fire Service Headquarters at Birkenshaw.

Manuel, West Yorkshire's Chief Fire Officer, said that the helmet mounted camera would be "a big advance in safety."

Fire and Police Chiefs from the North of England and the Midlands gathered for a special seminar at the Headquarters' training centre to see the camera - the subject of both the Prince of Wales Award for Innovation and the BBC's Tomorrow's World programme - in action.

The County's Deputy Chief Fire Officer, in a statement to Bradford's Telegraph & Argus newspaper, said that "it will give firefighters the ability to see exactly the situation they are in. They can see their colleagues, other people and an image of a room. It will save lives."

The demonstration, organised by GMAv, proved very successful with the West Yorkshire Fire Service expecting to be one of the first British customers. Jim

Bradford Fireman Joe Huelin tested the equipment at a controlled fire at the training centre and afterwards commented that, in using the camera, he could see everything rather than having to struggle in the darkness.



▲ *The first public demonstration of the equipment which earned GMAv the Prince of Wales Award for Innovation.*



▲ *Bradford Fireman Joe Huelin testing Sensors Division's equipment in a controlled fire.*

(Photos by courtesy of The West Yorkshire Fire Service)

▲ *Closing ceremony. GMAv's MD Derek Dickinson presents the Winners Cup to Graham McAndrew, National Coach, accompanied by Roy Pentecost (l) Director of the Competition.*



The Environment - A Concern for us all

As concern grows amongst us all for the effect industry is having on our environment, GEC is developing its own environmental policies based on three objectives:

- 1) Compliance with environmental laws and standards
- 2) Implementing environmental improvements
- 3) Maintaining performance.

Across the Company there has been a surge of activity. Environmental status reviews and legal compliance checks have been carried out on over 140 of the businesses in the UK and key issues and priorities have been established.

Across GEC, a Corporate advisory service has been introduced. This Energy and Advisory Unit co-ordinates

GEC's efforts and provides each business with technical advice and support. The Unit also monitors and assesses the environmental performance of each business.

Most of GEC's Managing Directors have attended environmental briefings chaired by a GEC main Board Director.

In each business a Director has been made responsible for environmental matters.

On each site an Environmental Manager has been appointed, reporting to the relevant business Director. The site Environmental Manager's job is to implement the agreed environmental programme on each site. In order to do this, 120 of these Managers have undertaken an intensive training course at GEC's Management College at Dunchurch.

All sites are now working to a common environmental management system which ensures that issues are tackled systematically and efficiently and full advantage is taken of all experience and knowledge gained by individuals across the Company.

GEC-Marconi Avionics' Policy

GEC-Marconi Avionics has been initiating changes to its processes and improving working methods to improve on environmental standards.

Managing Director, Derek Dickinson, has issued a Policy Statement covering the company's 5 main ambitions in environmental matters:

- 1) Compliance with law relating to the environment.
- 2) Achieving good environmental standards in all our activities including the reduction, control, handling, storage and disposal of waste.
- 3) Making economic use of energy, water and all materials to minimise waste in all aspects of business.
- 4) Assessing regularly the environment of impact resulting from business operations and remaining fully informed of recognised best practices.
- 5) Communicating this policy to Company customers, suppliers and employees and encouraging their active involvement.



Rochester: Chris Frost



Edinburgh: Andrew Dall



Basildon: Geoff Marchant

Environmental Managers

GEC is determined that all business decisions will take full account of environmental concerns.

At GEC-Marconi Avionics we have 5 Environmental Managers covering our main sites:



Titchfield: Ray Taylor



Milton Keynes: Peter Chinn



An Environmental Audit Team was established at Titchfield in April 1992, tasked with reducing the usage of CFCs, then full phase-out in compliance with the US Clean Air Act of 1990.

The Audit Team comprises (l-r): Brian Bartlett (Materials Manager), Derek Giles (Industrial Engineer), Ray Hill (Process Manager), Bob Fry (Personnel Executive/Environmental Director), Ted Quigley (Safety Manager), Ray Taylor (Site & Environmental Manager), Miles Wheeler (Senior Chemist) and John Wood (Technical Services Manager).

One Major Environmental Issue: Ozone Depletion

Once the effects on the environment due to human activities which modify the ozone layer were fully realised, and the substances that deplete the ozone layer were identified, 25 countries agreed, initially, to limit production, and subsequently cease production of such substances. This agreement, known as the Montreal Protocol, was signed in 1987.

Among the ozone depleting substances concerned were Arklone and Freon, both CFCs which were used extensively for the cleaning of precision mechanical products and for flux removal.

The Montreal Protocol phase-out timescale for these substances was subsequently overtaken by EC Regulations which brought the phase-out forward. These Regulations now require an 80% cut in the manufacture of CFCs by January 1st, 1994 and a total ban by January 1st, 1995.

Immediate steps have been taken across GEC to reduce the

amount of CFCs being used and to identify and introduce new cleaning technologies which are vital to maintain Company business. Stringent controls on the use of CFCs were introduced and purchases have dropped by 55% over 3 years.

New materials and processes have now been found but changes will have some effect on working practices. The new processes are not as convenient as the ozone depleting CFCs and investment in new plant will be necessary. The measures are vital to protect the environment, to comply with the law and to enable our products to be manufactured efficiently.

The assessment of new technologies to replace those using CFCs has been carried out on a collaborative basis between Companies in GEC-Marconi under the co-ordination of the central laboratories at the Hirst Research Centre.

The full policy statement will be appearing soon on notice boards, and leaflets giving a guide to environmental issues and rights will be given to everyone.

Energy and Water Conservation

Reduction in the use of both energy and water not only reduces the Company's costs but also makes a significant contribution to the environment in terms of emissions into the atmosphere and conservation of finite resources.

A number of our sites now have energy management systems which control heating, lighting and air conditioning equipment. Employees can also contribute to energy savings by switching off lights which are not required during the day time and in areas not being used. Significant savings in electricity consumption have already been achieved over recent years and more are being

planned. Old light fittings are progressively being replaced by modern energy efficient units. Heating plant needs to be maintained to high standards to ensure maximum working efficiency during the heating season, and in some cases disposing of old inefficient

boilers and replacing them with smaller modern systems will result in further savings.

Water conservation measures have been introduced on our sites. Modern metal plating facilities have reduced water consumption and automatic controls have been fitted to toilet facilities which are major consumers of water. Water

audits showed that underground leakage was also a problem and the leaks have been identified and repaired. Significant reductions in total water consumption have been achieved on most of our sites.

Waste Disposal

The Government has introduced legislation covering the disposal of waste produced by industry and every employee now has a Duty of Care to ensure that all waste disposal is correctly undertaken. Toxic and hazardous materials must not be thrown away with office waste or discharged into main drains without prior approval and waste water must not be discharged into road drains or rainwater gullies. These are breaches of the Duty of Care and those responsible can be held liable. All toxic and hazardous waste must be collected and stored prior to removal from our sites by a licensed waste disposal contractor.

Some sites have made arrangements for re-cycling waste, including used computer paper, confidential waste paper, scrap metal, swarf and copier toner cartridges.



The newly constructed Material Process Plant at Rochester has been specially built to provide the Group with a facility enabling the surface of metals to be plated to a very high standard. Many highly toxic and corrosive substances are used to obtain the appropriate finish, all are controlled in both storage and usage to a high degree of safety. The Plant itself satisfies the Southern Water Authority that the trade effluent discharged is well within the stringent limits set by that Authority.

A check on discharge to atmosphere has again established that the comprehensive series of filters prevents the emission of toxic fumes.



At Milton Keynes GMAV occupies a new building designed to conserve energy.

Metal waste is collected on a weekly basis from Sensors Division at Basildon. ▼



GMAV's Navigation Systems Division site in Edinburgh, where the main environmental activity has been CFC reduction.

ALL AT SEA

Three of GEC-Marconi Avionics' Scottish staff had the opportunity to spend a week under sail on the training schooner, the Winston Churchill.

Each year, the GEC Management College at Dunchurch charts the vessel and staff can take advantage of the opportunity to spend a week at sea.

Ian Smith of Support Division's Test Systems Department at Donibristle in Fife, Hugh Somerville of Support Division's Technical Publications Department at South Gyle in Edinburgh and Stuart McMartin of Displays Division, also at South Gyle, were the lucky trio.

The week is aimed at building teamwork skills, self discipline and providing physical challenges. There are few labour-saving devices on board and Ian described the trip as "a training in pulling together, literally and metaphorically."

He said: "It was originally scheduled for late last year and we started, as per intention, from Southampton but there were gales and severe storms. We experienced one short sail in the Solent then were sent home."

Fortunately for Ian, Hugh and Stuart, the trip was organised again recently and the outcome was much more successful. In Southampton Harbour, the crew undertook basic safety training and familiarised themselves with climbing the masts. After this short introduction to life at sea, the vessel left port. More than 30 trainees took part and their hard work sailing the Channel was rewarded with stops at St Malo and Guernsey.



Hugh had undertaken some small yacht and dinghy sailing before but he had never experienced life on board a vessel like the Winston Churchill and described it as "brilliant".

He said: "It was a super time and I would go back tomorrow."

Stuart also has experience of smaller craft and said: "This was my first time on a tall ship and the main difference is it was bigger! Usually when I go sailing, there are just a few people but on the Winston Churchill there was a whole community."

The sail training schooner, the Winston Churchill.

Ian said: "We covered 364 miles in the week and I would recommend the Course to anyone. I may even go back this year as a Watch Leader. I am a keen sailor anyway and have done a lot of small boat sailing. The Winston Churchill gives people an opportunity to find out what sailing was like in the old days."

As the week on the vessel was a training exercise, Ian, Hugh and Stuart were sponsored by their training officers. Details on the Winston Churchill's annual trip for GEC employees are available from the Training Department and posted on staff notice boards.



Ian Smith at the helm.

Tornado Radar Repair Squadron Moves

After nine years at Royal Air Force Scampton the Tornado Radar Repair Squadron (TRRS) has moved to 30MU, Royal Air Force Sealand, near Chester.

The Tornado F3 Foxhunter Radar servicing facility was installed at RAF Scampton during 1984 by Marconi Avionics and Ferranti plc. (separate companies in those days) and staffed by some 75 personnel from both Companies.

The TRRS was under the overall management of Mr Ken Blyth (MAV/GAV Milton Keynes) from 1984 until 'Management Handover' to the Royal Air Force in November 1989. Since then it has had two Squadron Commanders; Sqn Ldr Peter Montgomery and Sqn Ldr David Ovenden.

The TRRS has provided third line support to the Tornado F3 fleet and has implemented two modification programmes, 'W' to 'Z'



standard and 'Z' to Stage '1', in the nine years at RAF Scampton. It was heavily committed to Operation Granby in supplying both equipment and personnel to the Gulf. For this effort the Squadron was awarded the Air Commanding Maintenance Units Commendation in June 1991.

The Repair facility has now become part of the Avionics Maintenance Wing at 30 MU RAF Sealand and

is commanded by Mr Tony Burke (Squadron Commander) and Flying Officer Tony Adams (Flight Commander).

The accompanying photograph shows Sqn Ldr David Ovenden, the outgoing Squadron Commander at RAF Scampton, receiving a farewell memento picture from Richard Bixley at the Tornado Radar Repair Squadron.

JOB WELL DONE

When a GEC-Marconi Avionics team visited the Royal Naval Armament Depot at Gosport recently, its members did not suspect that their work would come in for special praise from the Ministry of Defence.

Project Manager Jim Crosbie said: "It's a great reaction to get from a customer and shows their confidence in us."

After the meeting to accept modifications to Sea Dart test equipment the MoD made a point of passing on its thanks for the professionalism of the GEC-Marconi Avionics team.

Jim said: "Everyone had done their planning very well and the run through with the modifications went very smoothly, with no failures to either the weapon or the test



equipment. Colin Wotherpoon wrote the changes to the software programme at Donibristle and they were proved on-site at Gosport."

The team members were: 'Dick' Barton, Bryan Cooper,

The Sea Dart project team was congratulated on its performance by the MoD.

Ken Grainger, Tom Johnston, Sandy Reid, Gary Wall and Gerry McGee.

PASSING THE TEST

It takes determination to progress through the Youth Training Scheme and move on to do a Higher National Certificate in Office Administration. But two young members of staff at Support Division's Test Systems Department have done just that.

Sharon Anderson and Donna McNeil joined Test Systems straight from school in 1989 as Youth Trainees. Although they completed their two years on the Youth Training Scheme, they were offered full time jobs with the

Company as Clerk/Typists after a year.

During the Scheme, they went on day release studying for an SVQ in Office Administration (Secretarial) at Level Two. They then continued their studies to achieve the HNC in Office Administration (SVQ) at Level Three.

Sharon said: "We started studying for the HNC in 1991 at Lauder Technical College in Dunfermline. It included subjects such as interpretation of financial data, communications and producing business documents.

"The Course was undertaken on day release, so we would spend Monday to Wednesday at work, Thursday at college, then back to work on Friday. Since finishing college, working Monday to Friday seems like a long week!"

The HNC Course involved continual assessment, so there were no stressful final exams to worry about. Classes came to an end in the summer, and Sharon and Donna were presented with their certificates. Sharon said: "It was interesting all the way through and although I plan to take some

time off from college now, I would like to go back and do a degree in Business Administration or a similar subject."



Sharon Anderson with her HNC certificate.

Young and Enterprising in Fife

Support Division's Test Systems Department in Donibristle, Fife, has staged a ceremony to celebrate the achievement of its Young Enterprise Scheme (YES) team over the course of the last year.

Training Manager Bob Spilsted said: "This is the third year that we have been involved with Inverkeithing High School. This year, the team formed a Company called ART-fx which produced three issues of a newsletter and made a small profit.

"The greatest benefit is that the pupils are learning by doing and it is real. It involves issues like motivation, finance and team-leading."

The Inverkeithing pupils performed well in the YES exam set by Strathclyde University. They scored three Distinctions and five Credits.

Bob encourages managers from the Company to act as advisers to the YES team and this year Norman Middleton took on the role. To mark the end of the year's activities, medals were specially struck for the pupils taking part as well as Norman and two Inverkeithing teachers.

David Anderson, Manager of Test Systems, presented the medals to the YES team, teachers and advisor in the assembly hall at the school. David said: "This experience will be of great benefit to you in your future careers. Education such as this helps to prepare you for the competitive world of employment. I compliment you on your very good effort."

The enterprising teachers, pupils and GMAV staff involved in this year's scheme.



Many Rivers to Cross

Steve Roberts of the Company's Mountaineering Club in Edinburgh may have experienced a difficult river crossing (see picture), but not all are as problematic, according to fellow member Keith Cocks.

Keith is encouraging new members to join the Club for its autumn outings and said: "Not all rivers are as bad as this. Most can be crossed using normal bridges!"

On 1-3 October, the Club visited Invercroft Cottage, Achnasheen, for a weekend of walking. The cottage is approximately ten miles from Bearnais around where Steve took his walk on the wild side.

On 15-17 October, the Borders is the Club's destination for a weekend of cycling from the Tweedmuir Hut near Broughton.

From 22-24 October, the Inchbae Lodge near Garve serves as the venue for the Club's annual dinner.

On the weekend of 12-14 November, Glen Coe provides the hillwalking, and Black Rock Cottage the accommodation.

Finally, from 26-28 November the Club plans to leave the country and head off to...England. The Newlands Hut in the Lake District will serve as a base for what might be described as some fine winter walking.

As Keith stressed, new members are welcome and should contact Club Secretary Andrew Haswell at Crewe Toll on Ext. 4708 or at home on 031-336 5092.

Steve Roberts negotiates a tricky river crossing in the Highlands.

YES! IT'S A HAT TRICK

Firhill High School in Edinburgh notched up a notable success by 'winning' three prizes in the local Young Enterprise Scheme (YES) awards.

YES is a UK-wide initiative which gives senior school pupils a taste of business by allowing them to run their own 'Company' for a year. They deal with matters such as marketing, production, personnel and finance and are advised by a representative from a local firm. Firhill was able to draw on the expertise of Bob Morrison of GEC-Marconi Avionics' Training Department in Edinburgh.

Bob said: "I have been advising Firhill for three years now. Out of 40 schools taking part in the Lothian Section of YES, Firhill won the prize for the best Company, as well as the

Institute of Marketing's award for the best marketing strategy and the Institute of Chartered Accountancy's award for best financial control."

The Firhill team had no particular product as such, but took a more entrepreneurial approach to the business and dealt in a range of items appropriate to market conditions. They sold Christmas items and Easter goods at the appropriate time of year. This flexibility helped the team to win the award for best marketing strategy.

Bob said: "YES is an excellent scheme for putting over business principles to senior pupils in schools." The Firhill team will now go forward to take part in the Scottish YES competition and if they repeat their Lothian success, the UK Final beckons later this year.



Bob Morrison (left) and teacher Julia Ross (right with the prize-winning Firhill High School YES team and awards.



The Firhill High School YES team hard at work under the guidance of Bob Morrison and teacher Julia Ross.

HAYNES ON TRAINS

Fancy a trip to Mallaig in a traditional steam train? Or how about Fort William? What could be better than sitting down to dinner in a lovingly restored railway carriage as you cross the famous Glenfinnan Viaduct?

The good news is that trips such as these take place every year, thanks to the Scottish Railway Preservation Society (SRPS). Senior Software Engineer Roger Haynes, who works with Support Division's Test Systems Department at Donibristle is a member.

Roger became involved with the SRPS in the mid-1970s when he went on some of its tours, but his interest in railways dates back much further than that. He said: "I originally came from just a few miles out of Crewe, the famous railway town. I was also involved with my University's Railway Society."

After a few SRPS tours, Roger joined and helped out as a Steward. He

The 101 year-old North British Locomotive number 673 'Maude' was overhauled by the SRPS and made its return to the tracks on the Bo'ness and Kinneil Railway.



said: "The Society is a charity which was founded in 1961 with the purpose of preserving and displaying historical items from Scotland's railway heritage.

"It started building its own line at Bo'ness in West Lothian in 1979 and the line reached its present state in 1989." This, known as the Bo'ness and Kinneil Railway, runs a few miles from Bo'ness to Birkhill Station. At Bo'ness, the SRPS has assembled a collection of railway buildings, equipment, locomotives, carriages and wagons.

Roger said: "We are the only voluntary group in Britain which maintains a train to run on a main line. The Society's members also help maintain the railway carriages which are painted in a traditional maroon colour."

Other GMAV staff at Donibristle involved in the SRPS are Alex Hunter and John Walker. Roger himself is now responsible for organising some of the Society's tours which are open to members of the general public.

He said: "I am responsible for tours to Chester and the Kyle of Lochalsh this year. This means taking charge of things from when the Committee decides the programme. I cover the route, stations, advertising and publicity, then I am in charge of the train on the day."

There are a number of tours scheduled for the remainder of the year including Edinburgh to Fort William on 9 October and 16 October; Edinburgh to Inverness on 6 November; Edinburgh to Aviemore on 13 November. Breakfast, lunch and dinner are available in the dining car.

The Bo'ness and Kinneil Railway will also be running special 'Santa steam trains' in November and December. If you would like more details on membership of the SRPS, or just a brochure on the tours being run between now and Christmas, call Roger at Donibristle on Ext. 3057 or at home on 0383-822944.



CATCHING THEM YOUNG

The Company's Training Department at West Shore Road, Edinburgh, is attracting a new generation to engineering by running a series of Technology Mornings at nearby Royston Primary School.

Training Manager Bob Morrison said: "We want young people to be interested in technology at a very early age and be able to relate technology to the everyday world."

"If we can encourage this in youngsters then there will be no mental block when they reach secondary school. The seeds are sown and the interest can flourish."

The Training Department in Edinburgh has sent Company Trainees to these Technology Mornings in the past, but the aim now is to train teachers to do it

themselves. Later this year, a group of Edinburgh primary school teachers will visit the Company for a four session electronics workshop.

To ensure that the school-children develop an interest in the work, Bob tries to make their tasks as much fun as possible. He said: "With primary sevens, we split a class into groups then invite each group to make an illuminated advertising sign for Sega, the computer games Company."

"The children design and build a free-standing display incorporating flashing lights which would sit on a shop counter. That is quite an achievement for a primary seven class."

Royston Primary School Teacher, Gillian Paul, with a primary pupil.



A RECORD TO BE PROUD OF

The Kitsune Gari Judo Club at Milton Keynes had a busy end to its season with members performing well in a number of competitions.

The Club took part in a senior event, for players who have not yet reached black belt status, at Castle Vale Sports Centre. Chris Noble and Trudi Noble fought well in the brown belt category and carried off silver medals while Trevor Heasman earned a blue belt.

Following this event, Alf Walker and Kevin Rand travelled to St Ives for a special Course which enabled Alf to gain his black belt second dan.

The Club also participated in the junior national championships at the Aston Villa Sports Centre in Birmingham. Alf, who is an instructor, said: "This is the most important event in our calendar. We had only five players in competition this year but on three

occasions we were just one fight away from the medals.

"Looking back, the National Championships this year is the first competition in almost three years in which the judo players of Kitsune Gari have failed to win a medal. Well done all! That's a record to be proud of."

To round off the season, the Club took part in the Hertfordshire Area Open and Alf said: "Now we can all have a well-earned rest."

* The Kitsune Gari (Fox-hunter) Judo Club is a Sub-section of the Milton Keynes Sports and Social Club (SSC). It runs the following practice sessions at the SSC premises:

7.00pm to 8.30pm on Tuesdays, for juniors and seniors.
6.30pm to 7.30pm on Fridays, for novices and seniors.
7.30pm to 8.30pm on Fridays, for juniors and seniors.

To find out more, contact Alf Walker on Extension 3279 at Milton Keynes.

GEC MK SSC POOL SECTION

REQUIRES NEW MEMBERS TO PLAY IN A LEAGUE ON TUESDAY AND THURSDAY EVENINGS. ANYBODY INTERESTED SHOULD CONTACT:

MARTIN BYRNE, Ext. 3426 DAMIEN HEALEY, Ext. 3303
KEVIN SMITH, Ext. 3458 DAVID HARRIS, Ext. 3456

GEC MK SSC DARTS SECTION

The 1992-93 Milton Keynes Darts League season ended in June. Two teams were entered; GEC Tornados in Division 2 and GEC 'B' in Division 3.

There were mixed results for both teams, the Tornados avoiding relegation with some good results against tough opposition and GEC 'B' just missing out on promotion. Both teams had little success in the Cup Competitions although S. Dancey and S. Ryan of the Tornados reached the final rounds of the Men's Pairs Competition.

Due to the loss of a couple of players from both teams over the summer, it has decided to enter one team for the 1993-94 season. It is hoped that a larger and stronger team will bring more success. League games are played on Monday nights from September to April, support and new members are always welcome.

The final League Table results for 1992-93 and further information is available from Neil Russell Darts Section Chairman at Milton Keynes.

GEC MK SSC (SHORT MAT) INDOOR BOWLS CLUB

For some time it has been the Club's hope to enter the Northamptonshire League this next season. Now it is no longer merely a hope but a fact, as the Section is entering two teams the "HUNTERS" and the "HAWKS" into the League. Having enjoyed recent success at Hemsby with the placement in the final 8 out of 1000 entrants, the Section will be hosting a few important games throughout the season, all these being played under the ruling of the "ENGLISH SHORT MAT BOWLING ASSOCIATION", the mat being 45 feet long.

The current fixture dates are:

Sun. Oct 17th England v Northamptonshire. Sat. Mar 20th County Finals Northamptonshire A Teams. Sun. Mar 21st County Finals Northamptonshire Premier Teams

The Section's Annual Weekend of Bowls will be taking place on 9th and 10th of October, with play commencing at 10am each day.

Further information can be obtained from Club Secretary Brian Nelson, Ext. 3114.

Dalgety Bay's Big Day

The small coastal town of Dalgety Bay in Fife came alive for its annual Gala Day recently and GMAV staff played their part in the festivities.

The day was organised by the Inverkeithing and Dalgety Bay Round Table which invited Support Division's Test Systems Department to take part. Based at Donibristle Industrial Park, Test Systems is close to Dalgety Bay.

Senior Personnel Officer John Love said: "The Company hadn't done this for some years, so we thought it would be a good idea to get involved again. We asked ten volunteers from both youth trainees and trainee engineers to dress up in cartoon costumes, as the theme of the Gala was cartoon characters."

Timbercraft was kind enough to lend a lorry for the event, and with a borrowed Territorial Army camouflage net and some improvised paper flowers, Test Systems had a float to be proud of.

On the day, the best decorated float was to be chosen by Scottish TV personality Glen Michael. Unfortunately, a traffic jam prevented Glen from arriving on time so Youth Trainee Jennifer Taylor took his place. As she was wearing a Pink Panther costume at the time, no-one could tell who was inside! Jennifer sat in the lead car, waving to the people along the route. Glen arrived once the procession had finished, but despite Jennifer's efforts on his behalf, the GMAV float did not emerge as the winner.

John said: "We threw out sweets and balloons for the kids and we hope that next year, all the Marconi Companies at Donibristle will enter. Donibristle Industrial Park is home to Marconi Radar and Control Systems, Marconi Instruments and Marconi Simulation as well as GEC-Marconi Avionics. There were a lot of people at the Gala Day and it was good fun."



Test Systems' cartoon cavalcade ready to go at the Dalgety Bay Gala Day.

CHAMPAGNE SQUASH

There was a day of fevered activity at Edinburgh University's Sports Centre recently when GMAV staff made use of the facilities for a squash tournament.

The competition attracted 17 men and one woman from Radar Systems Division's Signal Processing Laboratory at Crewe Toll. The sole female competitor, Mairi Torrie, said: "Each player had a handicap based on known form to make the competition fairer and the competitors had a wide range of ability and fitness."

"The format was a first round of pools of four or five, followed by knockout."

Prizes were awarded to the top three, and to the eighteenth placed person. The overall winner, Bruce Kidd, collected a bottle of champagne and a Company t-shirt for his efforts, while the second and third placed competitors Peter McNeill and Peter Lindsay respectively were rewarded with wine.

George Young finished in last place and took home a consolation Company t-shirt for his pains.

Mairi, who ranked thirteenth, said: "It was a great day and everyone who took part enjoyed themselves."

RNIB THANKS

The following is the text of a letter received from Sharon Hargreaves, Regional Office Administrator (Midlands & Anglia Region), in response to GMAV Milton Keynes' fund-raising activities:

Dear Friends

I am writing to express my sincere thanks for the most pleasing sum of £166.42 in support of our many vital services for the blind and partially sighted in your area. Would you please also, if possible, pass on my warmest thanks to all those associated in any way with the raising of this amount.

An average of 110 people per day lose their sight in this country and now nearly a million people in Britain suffer from a severe visual handicap. The RNIB and its Local Blind Society Partners would find it difficult to cope with this growing problem without the willing and continued support of people like you, and others concerned enough to help.

On behalf of the blind and partially sighted, both locally and nationally, may I take this opportunity of thanking you once again and wish you continued success in all your future activities.

Yours sincerely'

CAN YOU KICK IT?

Soccer success for Seoul Brothers

Imagine a football match where the teams are six-a-side. Each team must have three men and three women. Only women can score goals, the goalie has to be a man and in case of a penalty shoot-out, only women can take the spot kicks. Confused?

But it happened at Donibristle! Support Division's Test Systems Department organised a 'Soccer Sixes' to raise money for its Marconi at Donibristle (MAD) Charity Committee.

Committee Secretary Wendy Sherman said: "It wasn't real football, but more like an 'It's a Knockout' version. We raised £216.60 through the entrance fee, programmes and a barbecue, tea, coffee and home baking. Some will go to the Dalgety Bay Children's Playgroup and the rest to other causes in the area."

The competition took place on the grass outside Test Systems'

Fleming Building at Donibristle. Seven teams entered and the eventual winners were the Seoul Brothers.

This team was made up of five Korean visitors to Donibristle, and Wendy. The Koreans are here for a training course on test equipment for inertial navigation platforms and Wendy said: "Comprising all men they were one short for a team of six. I joined them for the day and two of their team pretended to be women!"

The Seoul Brothers overcame the Drawing Office Dribblers in Round One, on penalties, beat the Panthers in Round Two, on penalties, and triumphed in the Final over the Six Mixers...yet again on penalties!

Wendy said: "It was a great day and everyone enjoyed themselves. The total donations from our Charity Committee over the last 12 months amounts to £2,975 and 16 different Organisations have benefited."



Wendy, centre, with her Korean team-mates, mascot and the MAD Soccer Sixes Shield 1993.

Staff Suggestion Scheme Successes

Recent cheque presentations were made to Stephen Evans and Michael Strudwick, both members of BMU's Section 041, for suggestions submitted to the Suggestions Scheme.

Stephen Evans

Last November, Stephen Evans, a Prototype Assembler, had seen the latest modification plate on the Diesel Emission Sensor Head Assembly.

He realised that the handle assembly did not require the four expensive captive screws any more. Instead, standard fixings (screw, plain washer and spring washer) could be used. These were much cheaper - saving over £3.50 per unit.

This does not appear very high when the Company is making a few very expensive products. However, with the Diesel Emission Sensor quantities the saving adds up to a substantial amount of money.

As always, both the Assessor and the Committee had to weigh-up the advantages and disadvantages of Stephen's suggestion. They assumed the captive screws already bought will be used up. But there is a big PLUS for GMAV at the end and the idea earned him £1,500.

Michael Strudwick

Like everyone else on the PGM2 project Michael Strudwick, a Wireman, is being asked to increase "throughput" and minimise quality errors.

When making the cableform, pins are crimped onto the end of each lead. Then these are put in prescribed locations in a connector housing to make up the whole assembly.

So far on PGM2, one connector has been assembled at a time. Michael has suggested an assembly aid to allow five connectors to be held at once with the index position on each pointing the same way.

It's quicker to fit "pin no. 1" from each of five cables into the connectors then find where to put 5 "pin no. 2", etc. and there are fewer random mistakes.

This assembly aid is being introduced on a current order, with another batch to follow. Even after allowing for the cost of the fixture, there will still be time and money saved.

Although a similar idea is used on some other projects, there would have been time and money wasted if it had not been used on PGM2.

So that's why good suggestions are always welcome, and in this case it has earned Michael £200.

Sensors Division always welcomes ideas which can save costs, improve its products and make its workload easier.

Congratulations to Stephen and Michael on their Awards.

THE SENSORS DIVISION SUGGESTIONS SCHEME: What is it for?

To encourage ideas that help the growth, efficiency and prosperity of our business, and reward staff for ideas which are not part of their normal job.

Who can enter?

Anyone employed by Sensors Division.

What ideas are wanted?

Good ideas for:-
- REDUCING the cost of designing, making and maintaining our products,
- IMPROVING methods, quality, reliability, output etc.
- INCREASING our business.

What to do?

Write your suggestions clearly. Put the subject, give a short description and add sketches or drawings if appropriate. PRINT your name, job title and section, and sign it, then send it to the Chairman of the Suggestions Committee (John Viles, B535, Basildon).

What happens then?

1. You will get an acknowledgement. 2. The Chairman will send your suggestion to someone who can assess it and give an expert opinion. 3. The assessment will be discussed by the Suggestions Committee, who will decide whether the idea merits an award. 4. The Chairman will write to tell you the result. If no award is made, you will be told the reason.

The Committee?

The Chairman plus four other senior members of the

staff with broad experience, who meet at least every two months.

The Awards?

You can be awarded up to £5000 for suggestions which are adopted. As the amount is tax free, there are Inland Revenue rules which set the most any idea can receive in relation to the amount of money saved.

If you "could reasonably be expected to put this idea forward as part of your normal duties", the tax rules do not allow an award.

However, if it is a good idea your section or department will probably want to use it.

If your idea does not get a cash award, you may still be offered the choice of a gift.

More details and copies of the rules, can be obtained from your Head of Department, Cashiers, or the Personnel Department.

HOW DOES THE SCHEME RELATE TO TOTAL QUALITY?

ALL our work should be towards the goals of the Company's Total Quality Mission Statement. If you spot a problem and suggest a solution, or have found a better way of doing something, send the idea to the Suggestions Committee. If you find a problem but do not have a solution, tell your BIC Chairman of Jeff Ayres, Total Quality Manager. Then, if appropriate, a BIC would be set up to look for a solution.

Neither case should prevent the day-to-day communication in or between departments.



Award Winners Michael Strudwick (l) and Stephen Evans (r), with Operations Manager Frank Wood (cr).

Important Notice. A Date For Your Diary

The traditional E-O Group Xmas Party Night will be held on

FRIDAY 10TH DECEMBER 1993
dancing to
'RAINBOW CHASER'

Tickets: £3.00 Food to order

To reserve your tickets and for further details please contact:

- Julie Black Ext. 7303 'K' Building
- Sharon Humphries Ext. 3492 'B' Building
- Laurie Taylor Ext. 7250 'K' Building
- Gill Langan Ext. 7400 'K' Building
- Sue Stacey Ext. 5250 'G' Building

ALL WELCOME - FRIENDS OLD AND NEW

Apprentices and Trainees 1993 Intake

Welcome to those Apprentices and Trainees who have recently joined GMAV's Sensors Division as part of the 1993 intake.

We hope that you will find your career training with the Company both worthwhile and enjoyable.

Don't forget, if you have any problems these should be addressed to the Training Department's members who will do their best to help you.



The Royal Aeronautical Society SOUTHEND BRANCH

PRESIDENT: THE RT HON THE BARONESS PLATT OF WRITTLE CBE DL MA FEng FRAeS

Chairman: Eur Ing M Nicolini BA (Hons) CEng MRAeS

The Royal Aeronautical Society was founded in 1886 and incorporated by Royal Charter in 1949. The Society embraces all aspects of Aerospace, its meetings and publications are internationally respected. The headquarters of this professional body are in London and there are branches in the provinces and overseas.

Branch membership is open to anyone interested in Aerospace. No qualifications are required. The Branch activities consist of a winter lecture programme and visits to places of aeronautical interest in the summer.

Annual subscriptions are payable through either the Hon Treasurer or the Hon Secretary. (Adults £8; under 18 £4) Visitors (fee £2) are welcome. It is hoped that visitors will wish to join the Branch after one or two lectures.

The lectures are held on the first Thursday in the month at 8 pm at:

Flights Sports & Leisure Complex
Aviation Way, Southend-on-Sea

LECTURE PROGRAMME 1993-94 WINTER SEASON

7 October THE MARTEL MISSILE - FROM DESIGN CONCEPT TO END OF SERVICE

Ian Hunter was the Martel project co-ordinator for GEC-Marconi from its first studies in 1963 until its end of service life in March 1990. He will present some recollections of the Operational Requirements, the changing RAF role and the Martel's denouement.

4 November AVIATION ART - A BRUSH WITH WINGS

CHARLES J THOMPSON, GAvA ASA, well known local aviation artist and author, presents a slide show of his artwork together with a description and talk about aviation art.

2 December THE SPITFIRE AND MERLIN STORY

FRANK SHAW Freeman of the City of London, Liveryman-Worshipful Company of Carmen and Chairman of the Sir Henry Royce Memorial Foundation, presents a paper which traces the development of racing aeroplanes from 1920 through the Schneider Trophy series of competitions, culminating in the emergence of the celebrated Merlin engine Spitfire and Hurricane Fighters.

Further information is available from Martin Nicolini, Ext. 7142.

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
Marketing Services Officer, B450
Business Development Group



I can, of course, be contacted direct by phoning

G-Net: Access Code +344+3110

WEMBLEY STARDOM FOR CHORALE

The Howard Wallace Chorale, under the directorship of Airadio's Commercial Services Manager, took part recently in the Jean Michael Jarre World Tour Concert at Wembley Stadium.

Together with the Regent Hall Salvation Army Songsters, the Chorale formed the 100 voice choral backing to the laser/light musical spectacular. It was a great privilege to have been selected from the dozens of applications to take part.

BETTY'S BUNGEE JUMP

A 61 year-old Drawing Office Assistant and grandmother of seven, Betty Brown, recently tried her hand at Bungee Jumping in aid of ACTION Research, a charity for research into children's illnesses.

Betty's jump was undertaken over water at London's Docklands on Sunday 15 August and her sponsorship raised in excess of £350. Future donations will be gratefully appreciated.

This is not the first time that Betty has dabbled with danger. In the past she has experienced the Loop in a light aircraft to raise money for charity and, last year, parascended for fun. In the future she hopes to experience Wing Walking or Hang Gliding to raise money for other charities. The Bungee Jump has qualified her to become a member of the Dangerous Sports Club.



High over London's Docklands



Ready for action!

Michelle's Gold Award

On Wednesday 14 July Michelle Hopkins, from Sensors Division's Uncooled IR Business Area, collected her Duke of Edinburgh Gold Standard Award at a garden party held in the grounds of Buckingham Palace. The event gave the 2,000 Gold Award holders the opportunity to celebrate the occasion in a very grand setting.

Michelle, pictured here, gained her Award as an Air Training Corps' member, having trekked 150 miles through the Himalayas in addition to serving as a Cadet Warrant Officer in the Wickford Squadron.

Having achieved this Award she is now the Squadron's Duke of Edinburgh Award Officer, actively involved in helping young cadets to gain their Awards.



Nightbird Development Activities Completed

This photograph was taken during the presentation of framed Harrier GR7 pictures to MoD staff in celebration of the completion of Nightbird FLIR Development activities.

The presentation was made at St Giles Court, London, in the presence of both Sensors Division and MoD representatives:

(l-r) **Malcolm Court (Nightbird Project Manager), John Bird (Nightbird Prod'n Manager), David Hetherington (MoD - AES14), Brian Sams (FLIR Business Manager - UK), John Lyons (MoD - AES1), Ian Dex (MoD - AES14a), Paul McDermott (MoD - AES2a QA), and Steve Pickering, the original Nightbird Project Manager - now Business Manager for MRTs.**



FLYING SECTION

In July a party from Basildon's Flying Section made the annual pilgrimage to the local airstrip owned by George French, ex-farmer and long standing associate of the Section. The prime objective was to see some vintage airplanes and, hopefully, some flying. Those attending were not disappointed.

Among the airplanes seen were a BA Swallow (now quite rare), a Luton Minor, a 'brace' of Tiger Moths, several microlights and a Jodel.

The weather was good, with a blue sky and light wind providing perfect flying conditions for vintage airplanes. One Tiger Moth made several short flights reminiscent of the golden age of private flying in the 1930s. George French flew his Jodel, with Glen Cuthbertson as passenger, to view the local countryside. Glen is an active microlight pilot and was keen to view local airstrips which are suitable for microlight operation.

A number of light aircraft were flying in the airstrip's vicinity and several "popped in" to say hello, showing that even in this day of intensive commercial flying it is still possible to fly privately with the minimum of flying restrictions.

Several other external visits are planned for the remainder of the year, the first being a combined visit in September to the Tangmere Aviation Museum in West Sussex and the D-Day Museum in Portsmouth.

The monthly Aviation Video evenings recommenced on the first Monday in September. Here members and friends can meet and discuss aviation matters generally, in addition to watching some excellent aviation videos.

Personnel at the Basildon site who wish to join the Section are invited to attend any Section function or contact either Trevor Roberts on Ext. 3164, or Alf Porter on Ext. 3455, both of whom will be pleased to give full details of membership.

RETIREMENTS FROM SENSORS DIVISION

Since the publication of the second edition of VISION, three long-serving employees have retired from the Company, their combined service amounting to 115 years in total.

The accompanying photographs, taken at informal 'thank you' meetings with (i) & (iii) Brian Leggatt - Assistant General Manager, Operations Group and (ii) Mel Bennett - Group Manager (E-O), show the retirees.

(i) **Alfred Rowe** Snr QA Engineer - Ops Group, 39 years service
(ii) **Stan Oaker** Progress Planner - Prod'n Group, 38 years service
(iii) **John Balding** Inspector - Ops Group 38, years service.



SOCIAL CLUB COMMITTEE

Chairman	Mr W.O'Brien	B130	3291
Vice-Chairman	Mr L. Maunder	K130	7471
Gen-Secretary	Mr A.E. Street	S100	3128
	Mr G. Hopkins	K130	7471
	Mr T. Knight	K130	7280
	Mr B. Stokes	B205	3033
	Mr J. Bibby	D175	4030
	Mrs T. Garland	K507	7020

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 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.

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.

Classics for Pleasure

The 1993/94 series of LPO Classics for Pleasure 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 remaining 1993 concerts are as follows:
22nd/29th October

Elgar - Wand of Youth. **Delius** - The Walk to the Paradise Gardens. **Rutter** - Suite Antique. **Tchaikovsky** - Symphony in B minor (Pathetique). 19th/26th November

Wagner - Overture, Tannhauser. **Brahms** - Piano Concerto No. 2 in B flat. **Sibelius** - Symphony No. 5 in E flat.

Full details of these and the bonus 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.

SAFETY ON SITE

Ted Quigley, the Safety Manager, has been appointed as a Member of the Board of Governors of the International Institute of Risk and Safety Management (IIRSM). He has been a member of the Institute for 15 years, and was made a Fellow in 1991.

Following a career in the Merchant Service of 20 years, during which time he became Chief Fire Officer for the then

British and Commonwealth Shipping Group, Ted "came ashore" as a full-time Safety Practitioner with the Searle Manufacturing Company in 1975, four years later he took up his present position at Titchfield.

He has been the Safety Manager at Titchfield for 14 years, and also participates as an Executive Committee Member of the East Hants



Ted Quigley

Health and Safety Group, which is a local safety group in the Titchfield area.

Site Fire Crew

The fire crew pictured here is made up from various well-known faces from around the site.

Although, hopefully, there will never be a need to call on them, everyone should feel safer with the knowledge that our own fully trained and qualified team will be ready to cope in the event of an emergency.

As well as being prepared for all eventualities, they also undertake the task of sharing their know-how with us in the yearly



Pictured l to r: Deryck Kirkham, Alan Gentry, David Jacobs, Stuart Offer, Ray Taylor, Dave Briggs and John Brindley

fire training sessions, and should all be commended for the hard work and effort that they put in.

DRIVE FOR THE SCOUTS

John Welford, of Engineering, has recently completed a sponsored drive around the coastline of England, Scotland and Wales to raise money for the 25th Itchen North Cub Scout Pack.

John, a Leader with the group, was the driver and his son, Michael, was navigator. Estimating that the drive would take two weeks to complete they set off from Hedge End on July 24, aiming to be back in Hedge End on August 7.

They were sponsored by the Company John Laing who

provided a car with full insurance and National Breakdown cover, and local companies donated prizes for a draw. The first stop on the journey was the Isle of Wight. After a 4 hour drive around the island, they headed back to the mainland and over the next few days travelled along the Kent coast and up the East coast reaching John O'Groats on the 5th day. The journey through the Highlands of Scotland was not as pleasant as it could have been due to low cloud and very heavy rain. The journey was then made way down the West

coast into North Wales, through Caernafon, Fishguard & St. Davids, then along the South coast and across the Severn bridge into England, through Bridgewater, Minehead and Newquay, arriving at Land's End on August 5. From there the last two days were easy-going with only about 300 miles left to home. They arrived back at Hedge End on August 7, as planned.

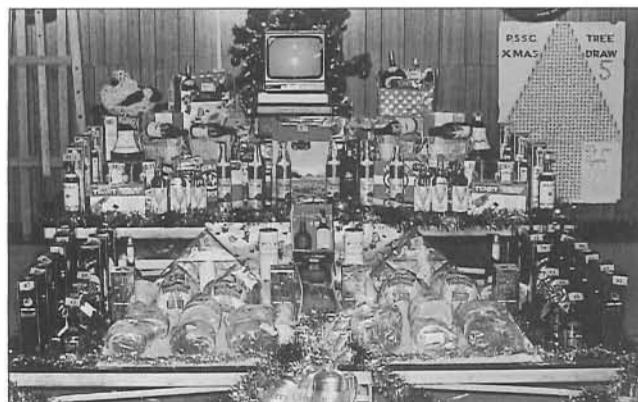
John and Michael raised just over £1000 for the Scout Pack and would like to thank everybody at Titchfield who supported them.

Sports & Social Club

How quickly the so-called 'Summer' went and the dark evenings returned. Looking towards the festive season of Christmas, there will be a number of social events of interest. From September onwards, one Saturday evening each month will stage music for dancing, and the last Thursday of each month will be Quiz Night.

In December/January there will be childrens' Christmas parties; for the 5-7 year olds, a tea party with an entertainer and Father Christmas, and for 8-12 year olds a Christmas Show in the clubhouse. Dates for these events still have to be arranged. Other functions will be as follows:

- Dec. 4 - Childrens' Tea Party,
- Dec. 11 - Clubhouse Party Night,
- Dec. 18 - Annual Christmas Buffet Dance at Ferneham Hall.



During the weeks prior to Christmas, squares for the 'Christmas Tree Draw' will be on sale at the Clubhouse bar. The Draw will take place on Dec. 20. The accompanying photo shows the prizes to be won. Departments and Club Sections are welcomed to

New Appointments

Personnel Director

David Kerr has been appointed Personnel Director of Power Systems Division. He brings with him 24 years of personnel experience within GEC, having been Personnel Manager/Personnel Director of 6 companies within 4 of the major GEC groupings. During that time he has gained experience within both the Commercial and Defence sectors. David has joined Power Systems from Marconi Underwater Systems Limited and says he is looking forward to returning to a Commercial environment with the considerable opportunities that



David Kerr

this offers for the future. David is married to a psychotherapist in private practice, an area in which he shares a common interest also being qualified to practice.

Welcome to the Business

Roger Slaymaker joined the Purchasing Department as a Senior Buyer on August 9th.

Stephen Judd joined the Avery Hardoll Manufacturing Department as a Fitter/Test Technician on July 5th.

Scott Phillips joined the Marketing Dept. as a Business Analyst on Sept. 1st.

Dave Moat rejoined the Business as Product Assurance Executive (Designate) also on July 5th.

Three other people rejoined the Company: Paul Atherton as a Fitter Technician in Repairs on July 12th, Vanessa Sweeney as an Admin. Assistant in the Engineering Department on August 2nd. Val McGrath as a Labourer in Electrical Assembly on August 31st.

A new intake of apprentices started on September 1st. They are Kevin Hooker, Kevin Smith and Marcus Viggers. They will spend their first year off-site at the Southampton Engineering Training Association.

Honours Degrees for Graduates



Congratulations to (l to r) Darren Williams, Trudy Stanley and Matthew Cook, for each obtaining a Second Class (Upper Division) Honours Degree in Mechanical

Engineering. They are seen here at the Conferment of the Degree of Bachelor of Engineering at Brunel University. They are all now employed in the Engineering Department.

Happy Retirement

Norman Keetch, Support Liaison Engineer, retired on August 20th after 19 years with the Company.

Gloria Stemp



Gloria retired from the Company at the end of August after 27 years service with Avery Hardoll Fluid Management, making her the longest serving female on the Titchfield site. Gloria started her career with Avery Hardoll at Havant in the Production Control Department, moving to Purchasing after 2 years where she spent the remainder of her time with the Company.

During her time at Havant she married the Maintenance Manager and introduced two sons to the Company, one of whom still works at Titchfield. Gloria is hoping to spend her retirement indulging her hobbies of travelling, reading and making quilts.

'Stars in their Eyes'

Dave Culver, of Avery Hardoll, has recently appeared on the TV programme "Stars in their Eyes". In the programme people impersonate singers, and the acts can range from 50s/60s singers through to current pop stars. Dave chose to impersonate Matt Monro with the song "Born Free".



(Photograph by courtesy of Granada TV, Manchester)

Dave used to sing with a local musical society and harmony group as a hobby, but after winning a talent competition 5 years ago he began to take his singing more seriously. He gradually built up a three hour show, with songs ranging from ballads to Rock & Roll, and in 1990 gave his first concert for a local charity.

Early in 1992 Dave successfully applied to "Stars in their Eyes" and his first audition was in August of that year. He was shortlisted for a second audition, following which he was selected to appear on the programme in July this year. Although he didn't win through to the final, Dave was certainly a "hit" with his friends at Titchfield. Singing now takes up the majority of Dave's spare time as he regularly gives shows around the South of the country.

book the Abbey Room for their Christmas parties.

The Clubhouse staff look forward to seeing you at all the various functions during the coming Winter evenings. You can be sure of a warm welcome.

Geoff Attrill received his award for 21 years service on August 29th.

CIT ORGANISATION CHANGES

Due to the promotion of Paul Burton to the 'dizzy heights' of Sales Manager, the onerous task of co-ordinating CIT's has now been placed in the capable hands of Alan Coles, AQS Manager, with the assistance of Maria Mouldsdales.

The last few weeks have been spent collating Continuous Improvement Team status charts (in a format which was "borrowed" from Avery Hardoll using the nimble fingers and patience of Joan Scantlebury), which are now displayed in prominent positions throughout the Business. The objective of this exercise was to convey the current CIT activities to all employees by illustrating both the objectives being tackled by the various teams in the Business and their current status. It is believed that the availability of this information may spur on existing teams

and could motivate personnel, not currently engaged in CIT activity, to perhaps identify new objectives and form their own CITs. The exercise confirmed that there are currently 51 registered CITs pursuing 161 objectives. To date, 7 teams have now attended presentations to receive rewards for the effort required to achieve their team objectives. The teams which have completed their initial objectives will be asked to make a formal presentation on their findings to Managing Director Nick Franks, to keep Senior Management personally informed on individual CIT activities. The charts will be updated monthly to report on any significant team activity, such as changes in team objectives and status or the formation of new teams.

If any teams require assistance in CIT activities, such as formulating performance



Maria Mouldsdales

measures and objectives etc, or have problems organising new CI teams please do not hesitate to contact Alan on Ext. 3608 or Maria on Ext. 3555, who will be pleased to assist where ever possible. The input from the various teams throughout the Business is very encouraging and demonstrates the significant effort invested by all concerned.

Engineering Change and Development

Our multi-functional team was set up with the aim of reducing the Cost of Quality within the Business.

During the past few months the Team has used Continuous Improvement tools and techniques to help analyse the problems and objectives originally identified.

The results of a special exercise, undertaken to eliminate waste by reducing Engineering Changes on new products, are now available. Change Requests for a selected product trial have reduced from an average 37 to 7 and the number of parts involved in design changes reduced from 29 to 4.

These benefits were achieved by simply providing resource from Production Engineering which enabled the D.O. and Design Departments, instant



Alan Coles

access to guidance and advice by Manufacturing. This is a very good example of how, through teamwork and good communications, major improvements and cost savings can be made.

Our Team is currently working on many ideas to reduce the problems and costs associated with Engineering Change.

A CLEAN AND TIDY CAMPAIGN

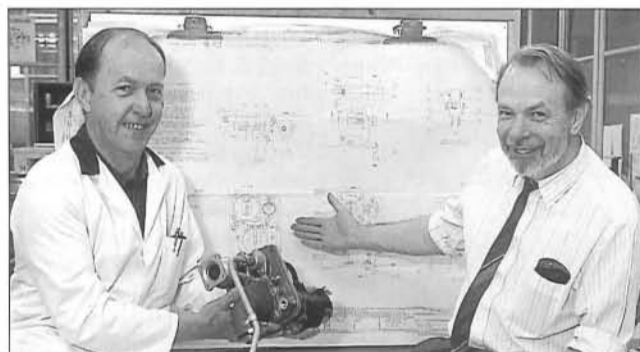
A site wide initiative has begun regarding housekeeping. Progressively departments will be targeted to improve their standards. Whilst the Power Systems Division is generally a clean and tidy place in which to work and presents the right image to its customers there is always room for continuous improvement. After all a clean and tidy place is generally a safe place to work. A tidy desk gives the right impression, a clean assembly will lead to fewer mistakes. Please do all that you can to improve the environment along with quality. It is so important. If you think you could contribute to the clean and tidy campaign by designing a poster, please submit your entries to Sue Gray, Marketing, Building 2. Any which are used will win their designer a prize.

'ALL RIGHT FIRST TIME'

A new Mounting Plate and existing Pump Assembly, has recently been introduced for the A330/340 Aircraft, to transfer fuel forward from the Aft Fuel Trim Tank.

The design - manufacture - delivery to the customer of first units has been completed, within a 6 month time span, with all parts delivered 'correct to drawing, first time'.

The use of concurrent engineering techniques together with 3D drawings, passed down through the suppliers co-ordinated by the Projects/Programmes Department, has given the project team, [consisting of B. Fisher - Designer, John



Ken Scott and Brian Fisher

Elford - Draughtsman, G. Westgate - Project Engineer, K. Childs/B. Davis - Purchasing, M. Steed - Industrial Engineer, W. Mahy -Product Assurance & T. Dunkley - Development Progress], the opportunity to reduce by several months the lead time to the Customer,

thereby giving a much tighter cost control opportunity.

This project has demonstrated the effect that teamwork and communications, both internally and externally utilising a wide cross section of Company employees, can have in achieving successful results.

Congratulations - CIT Teams

Presentations were made to the Continuous Improvement Teams who have completed their initial objectives for their CITs. In recognition of their work completed to date, each

team was presented with 'Team' mugs' and ties and scarves. The accompanying photographs show the presentations being made by Mr John Brian.

BULKMETERS CIT



Bulkmeter Team - M Pontaux, S Jones, C Homer & M Edward

The objective of the team was to reduce the number of customer units in house and, as a consequence, speed the units through the system and back to the customer.

Investigations result in an early understanding of the reason for unit failure. This means that corrective action can be introduced much more quickly and therefore limit both the number of defective units getting into the field and the potential liability.

The length of time that units are on site increases the risk of the airline operator running out of spares and declaring an Aircraft On Ground (AOG) situation. AOGs are costly to the operator and generally mean incurring the cost of a loan unit if a replacement cannot be supplied. Any disruption to the operator is a bad

CUSTOMER SUPPORT CIT



reflection on the Company and could be detrimental to the continuance of repair business.

The team has streamlined the procedures, reduced interpretations to Department personnel and diverted resources to assist.

At the beginning of the campaign the backlog within the Department stood at 50 units.

Over a period of four months our Team identified the objectives to reduce the time spent in stores kitting Bulkmeter Capsules. Initially the time taken to perform this task averaged 4 hours 20 minutes. After implementing the improvements the completion time was reduced to 2 hours 20 minutes. In addition a saving on consumable materials was identified and will amount to £324 per annum.

Customer Support Team - R A Chivers, L Coyle, D Cairns, I Clue, & R Oliver

The current backlog is now 44 units. However, had there not been an unusually high intake of 228 units during that period, the backlog would have been reduced to ZERO and maintained.

David Cairns

PRODUCT ASSURANCE CIT

Within the Department, the initial CI Team was focused towards goods received inspection. Using the tools available the team readily recognised, and agreed with customers, what needs had to be met and where improvements could be made. Significant improvements have been realised and the focus encouraged by CI has not only provided direction for the function but, because the agreed performance measures are being consistently achieved, efforts of 'customers' are now being directed at other criteria. This allows all concerned to make better use of the time available.



Product Assurance Team - J Couzens, G Blyth, D Tooley, K Smirk, P Perrot, J Geary, S Biggs, M Underhill, N Gearing & M Wheeler

These achievements have provided the platform from which over 75% of the Department is now routinely involved with CIT activities, demonstrating

continuing commitment to quality in whatever form it may be disguised.

Mark Underhill

COILWINDING CIT



Coilwinding Team - C Smith, D Farr, A Sullivan, M Barrie & P Dytor

During the time period of just over four months the Coilwinding Team attained their objectives in achieving a quality product 'right first time' by eliminating scrap and reducing rework levels from 49 hours to 7 hours per month. This group in particular has earned a reputation on site for making collective decisions and operating together in the true sense of the word 'TEAM'.

Alan Coles

**FAMILY "FUN" AND
THE FORMAL "GAMES"**

The rain held off. The children enjoyed themselves, with parents watching their races and sometimes taking part in the seven events making up the Inter-Group Championship. Unfamiliarly - named teams were dominated by the Display Systems Group combining the previous GSD and ADD resources and winning the Athletics, Bowls, Netball, and Swimming events. Computing Systems concentrated on the Tug-of-war, winning in the same style as they did last year. Five-a-side Football was won by CACG, and Hockey by MSG - MASD have always been strong in that event, also winning last year. In spite of a much-reduced overall entry, competition was well to the fore.

Medal Winners in the Swimming Gala, which took place this year in advance of the Sports Day.

Sue Sunnucks of CACG admires her cup for Victor Ludorum (Ladies).

In the Athletics, Victor Ludorum (Men) was Ian Coaker of CACG. He received his Trophy from Mrs Joan Colston.



**25 Years
in Control**

Keith Snelling has spent most of his 25 years with 'flight controls' Divisions; his first appointment in TACD was as Development Engineer, and he is now Technical Director of Flight Systems Division. Keith has successfully held appointments in more locations at Rochester than most. Over ten years were spent in the development of flight control systems in TACD and FCD, and in 1980 Keith was appointed Engineering Manager for the newly formed Combat Aircraft Controls Division, with responsibility for the Jaguar Fly-by-wire Integrated Flight Control System; this demonstrated the successful concept which has now evolved into the FCS for Eurofighter 2000.

Keith then moved to ISD in 1983 as Technical Manager, and in the same year was appointed Deputy Divisional Manager. In 1984 he returned to CACD as Divisional Manager, moving 3 years later to ADD as DM responsible for a 900-strong team in a predominantly export based business.

1991 brought a return to ISD, and then early this year Keith was appointed Technical Director of the new FSD. He is now responsible also for Technical and Quality matters within the Division and for Rochester Site Computer Services Group.

In his presentation address, FSD's Divisional Managing Director John Colston paid tribute to Keith's many contributions to our business over the years - not forgetting some of the less formal ones to the benefit of customers and ourselves! Keith remarked that as well as the capability required in

his career, a degree of the right sort of luck was involved, and he was most grateful to the people he has worked with in the many teams led by him.

John Colston (l) hands Keith his presentation clock.



THE GREAT DSGR TREASURE HUNT

The Saturday afternoon of 24th July found 13 groups of hunters scattered across the depths of the Kentish Weald. Armed only with a series of clues and a set of eleven sealed brown envelopes the competitors were released, at five minute intervals, from the car park at the top of Blue Bell Hill. by Ian Bull, DSGR's Engineering Manager. Eight hours later he was to greet them with a barbecue at the Black Horse in Pluckley (star of The Darling Buds of May, and the most haunted pub in Britain).

This was the Display Systems Group "deci-annual" Treasure Hunt. Our objective was to identify a set of nine Kent villages from a series of cryptic clues. This was to send us the 45 miles (if you did it right...!) from Bearsted, Otham, Boughton Monchelsea, Marden, Goudhurst, Benenden, Rolvenden, Woodchurch, Bethersden to Pluckley. At each destination a set of questions were posed of varying degrees of difficulty

(e.g. very difficult to impossible). What are the animals on top of the church? (Bearsted). Who is Mr Nobody? (Otham Churchyard). What did John Braddick, the owner of "The Mount" and an established trader to the West Indies in the eighteen hundreds keep in his cellar? (Boughton Monchelsea).

Techniques varied from in-depth cross examinations of local publicans, to an equally in depth study of their beer! Guide books were trawled and Springfield library ransacked. At Woodchurch windmill the curator, with an eye to a good profit, refused to answer our questions. Instead he directed each group to the guidebook which they were able to purchase for a bargain price of only 70 pence! (Unfortunately this contradicted Ian's answer, resulting in some healthy "discussions" later in the day!).

Finally, sated by beefburgers and sausages in the pub gardens, came the moment that we had all been waiting for...(No, not the

taste of Rob Lindsay's chilli)... the results.

In third place were Diane Hayes, Graham Ford, Anne Smith, and Sian Cross. Second were the "management" team of Mick Mills and John Smith, who were narrowly (and perhaps mis-guidedly) beaten by the combined Falcon/Corsair/Towers team of Iain Wilmington, Keith Rogers, and Joanne Kelsey.

And what did John Braddick keep in his cellar? Well, the given answer was slaves. However, a nameless member of the Software Department had it on good authority that it was actually ferrets, an answer he loudly voiced at stages throughout the evening!! We went home tired but knowledgeable having showered thanks onto Ian for his efforts and suggesting that he may like to increase his Treasure Hunt's frequency by a factor of ten in future.

Joanne Kelsey.

STOUT - HEARTED WHEELERS

The London to Brighton Bike Ride was staged on Sunday 20th June. This year's entry of 76 riders from Rochester was the largest team in the event, in which over 25,000 fit(?) and energetic riders took part.

For ten weekends before the event, practice rides were organised ranging from 30 to 50 miles. These always included pleasant hills such as Bluebell, Detling, Boxley or the 'Cliff' near Bredhurst. These tough training rides inspired the most imaginative excuses from people as to why they couldn't quite find the starting points.

On the Sunday morning our team left Airport Works at 3.30am. Unfortunately the departure was timed to the second and 3 riders missed the coach. Showing true dedication, two of them made their own way to the start at Clapham and joined the rest of us. The start was well organised this year and most of the GMAV team was on its way by 7.00am.

Euan "I assembled my new bike this morning" Anderson was our first incident, his pedals fell off five miles from the start. After finding some mechanics he resumed the ride and made a day of it. In fact, he had four one hour breaks during which he slept. At one stage, an ambulance stopped only to find Euan snoring.

Colin "Big Mig" Bowler was the first GMAV rider to reach

Brighton, completing the ride in a time of three hours. He was clocked at a speed of 48 mph and would have got a speeding ticket if the Police motorbike could have kept up with him.

The majority of the team members were in Brighton by 11.30am. Gary Lambkin stayed with Helen (Multisport Arink Racket) Butler all the way and fulfilled his pre-nuptial agreement (young love!!). Tracey wandered in at 3.45pm blaming the few ("I lost count") pub stops she had to endure. Euan (dropped pedals) was our last man in. Still, he looked as though he'd just woken from a refreshing night's sleep (might have had something to do with the 4 hours of sleep he had en-route!).

To the more serious matters, thanks to GMAV for their contribution towards the transport cost, thanks to Gary and Helen for the numerous food shopping trips they endured; thanks to Ann, Hazel and Janet for setting up the Barbecue on the beach and once again a special thanks to Mike Smith for driving the lorry.

Apart from the fun element of the event, its prime objective is to raise money for the British Heart Foundation. The sum raised by our team was £1,800. Excellent effort by all - here's to next year.

We're planning some 'endurance' events for next year as well as the London to

Brighton Race. Anyone who would like to join in or support us, contact me on Ext. 3383.

Sanj Sakaria, CACG.

**Inter-group
Competitions
Completed**

FOOTBALL

Fourteen teams entered this year's League, with the Finals being played in good spirit; CACG beat FCG 2-1 to take the Trophy. The other semi-finalists were CMS and Boeing Engineers (FCG), and earlier contestants were Fishers, Support Division, Accounts, MSG, three teams from ISG, DSGR, Training, and a second CACG team.

BAT AND TRAP

On Wednesday evenings, from June to August, a progressive close-run competition between seven teams was held. In a last-evening win-or-lose contest between ISG 1 and Accounts, the trophy went to ISG with 5 and a half points; Accounts scored 4 points and were closely pursued by Support Division with 3 and a half. Other participants were ISG 2, CMS, CACG, and DSGR.

A Fine Win for ISG Software in the Interdivisional Cricket

In the fading light of 7th September, in conditions which favoured bowlers more than batsmen, ISG Software (ISG S/W) beat Fisher Controls (Fisher) to win the final of the 1993 Interdivisional Cricket Competition by 8 wickets.

Fisher, having won the toss and electing to bat, started their innings at a brisk pace, but unable to quite master the line of the ISG attack lost wickets steadily throughout their innings, finally succumbing in the 17th over with a total of 41 runs. Only Dave Walker (9) and Terry Presland (7) looked to achieve double figures against the well balanced, accurate attack of Simon Bennet 5-0-11-2, Mark Baldwin 5-1-14-3, Steve Russell 3-4-0-9-2, Eddie Spillett 3-0-4-5.

At the end of the first over of the second innings, ISG had lost 1 wicket for a total of 1 run, having had a sharp slip chance put down off the third ball of the innings. For subsequent overs ISG did not have the evening to themselves either. They also lost a second early wicket and found the first change of attack a bit of a stumbling block, giving a number of catching opportunities to the fielders. The batsmen continued to build a steady total; always ahead of the required run rate, they finally achieved

the required total through a boundary past square leg, bringing their score to 45 for 2.

As is often the case in limited-over matches, the "ground cricket" proved to be the difference in the sides (Bennet 24 n/o, Spillett 11 n/o, Patel 3-0-1-13, Martin 5-0-1-17, Byrne 2-0-0-10, Presland 3-0-0-4).

MC (Engineering) win the Maurice Finch Trophy.

Earlier, on a warm mid-August evening, Monitoring and Controls Engineering, MC (Eng) which is now part of ISG, won the runners-up plate trophy against Flight Systems Production.

The scores: FS(P) 93-9 innings closed (Trigg 13, Cownden 38) Botting 5-1-1-21, Norman 3-0-1-9, Camber 5-0-2-19, Stewartson 4-0-1-22, Harvey 3-0-3-7, MC(Eng) 94-5 (Springmore 22, Cooper 20n/o, Harvey 18n/o, Camber 14), Trigg 4-0-0-28, Wray 3-0-1-23, Cownden 45-0-1-20, Harmon 4-0-2-12, Patterson 1-0-0-9.

MC(Eng) won by 5 wickets.

On behalf of all the players from the 14 teams taking part in this year's competition thanks are due to the GEC Avionics Social Club Management Committee members and especially Brian Rogers, Peter Bird and the Ground Staff without whom the competition would not run.

GEC Avionics Athletics Club's Near Miss

We almost did it! After gaining promotion to the British League Division 4 last year, by winning Division 5, we missed by just one point (129/130), the next step up this year. In the final fixture of the season, at Cardiff in early August, the Club came third in the Championship, one point behind Cambridge. Indeed, with a level finish between these 2 Clubs it would have been GEC gaining the promotion because of the greater number of match points scored during the season.

The excitement went right through to the last event, with GEC just missing the top spot in the 4 x 400m relay to the Division champions and host Club Cardiff - by two tenths of a second. Cardiff won the meeting with 242 points, bringing their points from the four fixtures in the British League season to 23, with Cambridge 17 and GEC Avionics 16.

Team Manager Len Murphy commented that to a large extent the Club was a victim of its own success as, without the absence of two of the best athletes - Nigel Stickings and Spencer Barden - representing Great Britain at a meeting in Spain, the story would have been even better. Some injuries to the team members also told.

During the summer season, as a whole, the Club has had some excellent results, particularly among the ladies' events.

Alexander's Restaurant, located upstairs at the Hoo Clubhouse, is open again, with our Chef Alexis Antonin offering some fine menus.

FRIDAY AND SATURDAY EVENINGS 7-11 pm
£6 SUNDAY ROAST LUNCH (CHOICE OF 2) 12-2 pm

For Bookings, 'phone Medway 251492 (Short Code 6009) during Restaurant opening hours, or 844400 Ext. 4058 during Social Club Office hours, 8:30 to 5:00.

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

Book your Christmas arrangements now!

GEC Avionics Club ANNUAL GENERAL MEETING

The GAv Club's Twelfth Annual General Meeting will take place in February 1994.

The Constitution requires a number of Management Committee representatives to seek re-election after two years in office.

At the AGM, 3 vacancies exist for GMAV and nominations should be submitted to the Secretary by 31st December 1993.

Nomination forms are available from the Social Club Office, Snack Bar. Contact Elaine Beard, Ext. 4058.

For the Agenda, any items to be included must be proposed to the Secretary by the end of October.

GEC AVIONICS CLUB SWIMMING SECTION

The largest and most active Section in the Club has vacancies for training sessions at the Club Pool at Hoo.

Monday 8.15 - 9.15 pm Adults
Tuesday 6.15 - 7.30pm Children (age 5-12) - short waiting list
Thursday 5.40 - 6.15pm Mother and Baby under 5
6.15 - 7.30pm Children - as above

Tuesday and Thursday 7.30 - 8.30pm Squad Training
Friday 8.15 - 9.15pm Life Saving.

For more information, contact Cyril Moffett (Teaching Classes) Ext. 3068, or Ray Newman (Squad Training) Ext. 3464, or come and meet them at the Club Pool at the times shown.

25 Years Service



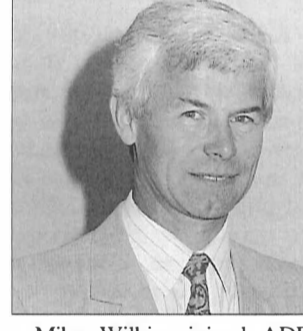
Maurice Parsons has worked in Central Quality Department as a Specification Writer, QA Engineer and as Manager of the Standards Section, now including the Electrical and Mechanical Calibration Labs. His particular interest in components is marked by his representation of the Company on a number of national and international committees.



Mick Waters, Logistics Technician, was a Tester on BAC 1-11 and VC10 systems, before moving to ISD Test in 1980, specialising in Tornado SMS. Later Mike moved to Technical Publications and most recently has become a Logistics Technician writing technical manuals, now in ISG.



Cyril Arnold, Production Technician in ADD since he joined, has followed the recent renaming into DSGR. Long-distance daily travel has broadened into a recent visit to Russia and the study of its language.



Mike Wilkins joined ADD Engineering during the A-7 HUD development and has made design contributions to many Head-Up and Head-Down display systems including A-4, A-7, F-16, Tomado, EH101 and AC-130. Progressing over the years from Development Engineer to Design Manager, Mike is now R&M Manager for DSGR.



Don Addis, at first a C5A Draughtsman in TACD, has built up his Design experience since the formation of FCD and its major contracts, from the emergence of Tomado, onwards through Boeing 747, Jaguar FBW, Airbuses and Airships, to the most recent Canadair Regional Jet and Boeing 777, where he is Senior Design Engineer.



Mike Huntley-Chipper started in Fisher's Machine Shop, and in 1969 moved to MACD prior to the merger into FCD. In 1979 Mike became Chief Estimator in FCD, transferring to CMS last year.

Congratulations!

Nick Hopper, Technical Author in Monitoring and Controls, ISG, and Angie Mayger, Contracts Officer in Support Division, were married at the Church of St Mary Magdalene, Gillingham Green on 14th August.

Kevin Harris, Leading Illustrator in Support Division Publications, married Karen Sangster at Bromley Registry Office on 27th August.

CHRISTMAS BREAK - LOUGHBOROUGH

"FRIENDLY" HOTEL 4 NIGHTS FULL BOARD LUXURY HOTEL FOR DETAILS + PROGRAMME CONTACT: ROD COLE Rochester Ext. 3502 OR Medway 848282.

£182 - LESS THAN NORMAL BED & BREAKFAST AT £45.50 PER NIGHT

INCLUDES COACH FROM MEDWAY TOWNS & RETURN!!

LIMITED NUMBER SO HURRY UP!

Company Christmas Ball

Saturday 18th December in the Main Canteen with "SHANGHAI Syncopated Orchestra," and "MISTY". Tickets £8.50 including Buffet. (All tickets will be sold on a first-come-first-served basis).

FOR SALE

FORD FIESTA 1.1LX G REG (APRIL 1990) - 4 DOOR - MERCURY GREY 12,500 MILES - SUN ROOF - ALARM SYSTEM. ONE OWNER - FULL SERVICE HISTORY - TAX - M.O.T. EXCELLENT CONDITION.

PRICE £5,100

Phone COLIN Ext. 3958 or Med. 850073

GEC Avionics Club CHRISTMAS EVENTS at the Club House

CHRISTMAS EVE DANCE

with

The Keith Howard Roadshow

NEW YEAR'S EVE DANCE

with

"HAPPY DAZE"

Tickets will be available from the Clubhouse, or from the Social Club Office, Snack Canteen (Ext. 4058)

33 Years of Design

Frank Wooller, Chief Designer, has retired after 33 years' service, starting with Elliott Bros. at Borehamwood, then moving with Airborne Computing Division to Rochester. In due course Frank became one of the founder members of the 'the first' PSD, when Powerplant Systems Division was formed and the whole Division used to go to the pub in DM John Bussell's car; Ian Stitt, John Colston, Malcolm Moulton, and Graham Mason completed the load. PSD has since evolved through MCD, to Monitoring and Control in ISG, with Frank in charge of design throughout as a much respected and talented designer. He now looks forward to an active retirement with an improvement to recent health problems in his back and leg. His fingers, worn out from decades at the drawing board, will also be dealt with!

OBITUARY

Sadly Paul Martin, who started with the Company in June 1962, died on Friday 24th September after a long and painful illness. We send all our sympathies to his wife Marion and son Darren.

We have heard of the death of John Dawes on 18th September. John retired three years ago after over 25 years in AS&RD, where he became well known throughout the Company by his work in helping to set up the Division's Systems Department, and later in Technical Publications.