

FLIGHT 921 TAKES OFF

United Airlines has set the pace for comfort on Trans-Atlantic flights with the introduction of its new Boeing 777 aircraft.

The 292 seat Boeing 777 made its first ever commercial flight on 7 June, as Flight 921 from London Heathrow to Washington Dulles.

Over the next decade the 777 is forecast to be worth more than \$1 billion to the UK's aerospace industry. GMAV's Flight Controls Division has developed the aircraft's primary flight control computers at the centre of its Fly-by-Wire system, with the Power Systems Division having developed a range of equipment, including fuel pumps.

The United Airlines' 777 will operate on routes to the USA from London, Frankfurt, Paris and Amsterdam this summer. As the launch customer for the aircraft, United has 31 on order



Flight 921, bound for Washington Dulles.

with an option on an additional 34 aircraft.

With 292 seats the wide bodied plane boasts vastly improved comfort in terms of seating and leg-room in First Class (12 seats), Connoisseur Business Class (40 seats) and Economy Class (231 seats) cabins. The Economy Class seats are among the widest in the air.

Bob Wilkinson, GMAV's Systems Engineering Director, commenting on the first commercial flight said, "As a result of the supreme effort put in by the integration team, we successfully integrated a state-of-the-art fly-by-wire system. Integration was a joint activity with Boeing, conducted at Rochester UK and Seattle by Boeing and GMAV engineers. The fact that the aircraft has been certified, delivered and enters service bang on time is a testimony to the dedication, determination and capability of this joint team."

GMAV has been working together with Boeing for over ten years on the 777, and the study programmes that preceded it. It is the effort, team work, and commitment put in over those years that has ensured that Boeing's first fly-by-wire aircraft, the 777, has been ready on time for its first fare paying passengers.



United Airline's 777 Economy Class seats are among the widest in the world.

New Helicopter for Royal Navy

The first of 44 Lynx Mk8 helicopters has been accepted into operational service by the Royal Navy.

The Lynx helicopter, in its many guises, has seen 18 years of operational service. Having proven itself with the Royal Navy in two conflicts it can now be described as probably the most successful small ships helicopter in the world.

Now, with the addition of a Passive Identification Device (PID), an upgraded comms system, and an integrated Central Tactical System (CTS), the Lynx has evolved from being a weapons carrier for anti-submarine work into a dedicated maritime attack helicopter capable of over the horizon search and destroy missions. In specific roles against surface targets Sea Skua missiles will be deployed.

One visual difference on the helicopter, and instantly noticeable (see the accompanying photograph) is GEC-Marconi Sensors' PID. Known as Sea Owl this steerable, stabilised system provides an infra-red tracking capability and passive target identification, by day or night and in poor weather conditions. Sea Owl meets the most demanding requirements of Maritime and border surveillance applications.

In addition, GMAV's (Edinburgh) Radar Systems Division is under contract to upgrade existing Mk1 radars in



Lynx helicopters to the new Seaspray 3000 standard.

Lynx Mk8 and frigate. (Photo by courtesy of HMS Osprey, Portland)

Representing the latest phase in the Lynx Mk3 to Mk8 upgrade programme, it entails the replacement of the analogue processor with a digital successor. GMAV's low risk, cost effective, processor interfaces with the existing Seaspray Mk1 transmitter, receiver and scanner and integrates the radar with the Central Tactical System (CTS). This makes the full colour Tactical Situation Display on the CTS, and Control and Display Units, available to the radar to complete the system.

The new processor will then be capable of providing independently scaled, orientated

and stabilised display outputs to the TSD and the radar display, track while scan (TWS) of up to 30 targets, constant false alarm rate (CFAR) thresholding, and the other processor features of Seaspray 3000.

Westland have now begun refurbishing Lynx Mk3 helicopters to Mk8 standard. Serving alongside its 'big brother', the EH101 Merlin, the Lynx Mk8 is destined to continue as the prime 'work-horse' of the fleet for many years to come.

The Lynx has proved itself a winner to the Royal Navy.

PRINCESS 'DROPS IN'

On a recent visit to Basingstoke by The Princess Royal, GEC-Marconi Sensors hosted Her Royal Highness's arrival and departure, by helicopter.

The Princess, attended by Lady Carew Pole, was in town to open the new headquarters of two Companies; Caradon MK Electric Ltd and PMS International.

In response to an official request made to GEC-Marconi Sensors in April, the Company provided a landing area on its sports field for the Wessex helicopter of The Queen's Flight.



The accompanying photograph shows Her Royal Highness with Lord Braybrooke, HM Lord-Lieutenant for Essex, and Lady Braybrooke. The Princess had flown in from a previous engagement in Maldon, Essex.

VISION was granted special permission to be present on the sports field and record what were, ostensibly, private moments for Her Royal Highness during a public occasion. Photography was carried out by John Carter from GEC-Marconi's Bad-dow Research Centre.

'NITE-OP' FOR POLICE PILOTS

Night Vision for Devon & Cornwall Constabulary.

Police helicopter crews have invested in GMAV's 'NITE-OP' night vision goggles, enabling them to see in the dark and reduce crime in the two counties.

NITE-OP Night Vision Goggles.

Full story on page 6.



STOP PRESS

14 July 1995: An F-14D from the US Naval Air Warfare Centre Aircraft Division flew for the first time utilizing a new Digital Flight Control System developed jointly by GMAV Rochester, Northrop Grumman and the US Navy.

Full story in next edition of VISION.

CUSTOMER CHARTER

...A policy statement focusing on business performance.

In laying the foundations to win future orders, based on current and past business performance, it is clear that, as a Company, GEC-Marconi must understand its customers.

To this end employees must establish clear lines of communication with them, so as to fully appreciate their requirements.

As the market-place becomes increasingly competitive GEC-Marconi has to adapt by offering better equipment, at keener prices and in shorter timescales if it is to succeed. The Company wants its customers to return again and again when there is a requirement to fulfil.

These items have been formulated by Peter Gershon, GEC-Marconi's Managing Director, into the Customer Charter which is aimed at radically improving perceptions of customers, both internally and externally.

The Company's standards of project management, employees' personal performance and achievement of objectives will be reviewed to ensure that customers recognise GEC-Marconi as their preferred choice.

GEC-Marconi

Customer Charter

- Make it easy for our customers to buy from us.
- Only make commitments we fully understand and believe we can meet.
- Meet all commitments to customers on time.
- Satisfy customers' requirements with systems, products and services that are at world class standards of value for money, time to market and quality.
- Ensure customers are treated professionally, promptly and courteously.
- Build and maintain long term, trouble free relationships.
- Promptly address and resolve customer complaints.

GMIRL'S IDE or IDCA

Acronyms are very much a part of modern life and this is very true in the world of detectors. It is also common for people to use different names to refer to the same thing, as is the case with the example shown in the title. What does it stand for and why is it of importance?

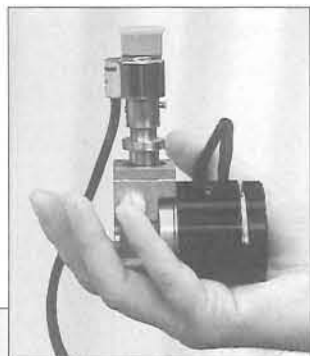
IDE and IDCA stands for Integrated Detector Engine or Integrated Detector Cooler Assembly, respectively, and both amount to the same thing.

In the last three to four years GMIRL has been steadily increasing the number of detectors built which use the cold finger of the cooler as the cold finger of the detector - hence the integrated detector cooler assembly. This design change has

greatly benefited cooler efficiency because there are fewer losses. This, in turn, translates to lower size, weight, and power consumption and is of particular importance for portable equipments where battery life is a major issue.

The traditional approach has always been to use detectors and coolers which could be separated and replaced in the field when one or another became unserviceable. This

IDE or IDCA



arrangement is shown in the accompanying photograph of a split cooler where the detector is remote from the cooler compressor. Improvements in both technologies have made the two items more reliable, to the point where the world is realising that significant benefits derive from the integrated concept.

The change of thinking has brought about some unexpected challenges. As the cooler shares some parts of the vacuum dewar, the cooler maker attempted to erode the traditional market for the

detector manufacturer and relegate GMIRL's product to the semiconductor component only. There have been many interesting discussions as the Company 'jockeyed for position' over the years but, in the end, it managed to retain the integrity of the product traditionally made, whilst making parts of the engine.

The IDE, or IDCA business, which started some four years ago, is moving forwards at an increasing rate and will reach approximately £1.5 million turnover in the coming year.

INVESTORS IN PEOPLE

On April 6, Hampshire Training and Enterprise Council presented GEC-Marconi Aerospace with a certificate in recognition of receiving a formal Letter of Commitment from the Unit's Managing Director to work towards Investors In People Accreditation.

This commitment represents an undertaking by Titchfield's Senior Line Management of each function to achieve the necessary

actions, within defined timescales, and gain accreditation for the Unit.

A staff booklet has also been produced for all employees. This contains an introduction by the Managing Director and explains the objectives of the Unit's Training Policy. This includes achieving and maintaining the National Standard for effective Investment in People.

REG RAMM AWARDED MBE

Reg Ramm, Company Commercial Manager, GEC-Marconi Sensors Limited at Basildon, has been awarded an MBE in The Queen's Birthday Honours List.

The Award is made in recognition of his service to the defence industry.

Having joined the Company in 1977 as a Divisional Accountant, Reg has since held posts in the Accounting, Contractual, Commercial and Procurement fields. Involvement in major programmes enabled him to lead negotiations for contracts, licences, offset and technology transfer in the UK, Europe, Far East, USA and Scandinavia.

Outside work Reg is involved in many voluntary and charitable activities. A serving Justice of the Peace on the Rochford and Southend Circuit since 1976, he also holds Committee posts in the Borough with Fair Havens Hospice, Southend Sports Council and the Churchgate (Westcliff Baptist) Sheltered Housing Complex. Reg is also



Reg Ramm.

an Associate Member of both the Institute of Chartered Secretaries and Administrators and the Institute of Company Accountants.

A blood donor for many years Reg recently achieved the accolade of becoming a Gold Certificate holder, for his 50 donations.

Aged 52 and married to Marian, Reg has two daughters - Linda and Paula - and a year-old grand-daughter Charlotte.

GEC-Marconi Sensors very much values Reg's dedication and success and heartily congratulates him on this achievement.

GEC-Marconi Sensors Limited

From 01 April 1995 the Sensors Division of GEC-Marconi Avionics Limited became a separate Company within the GEC-Marconi Group, and was renamed GEC-Marconi Sensors Limited.

This change reflects the importance of Sensors programmes and technologies within GEC-Marconi. Managing Director David Laybourn is responsible direct to Peter Gershon, Managing Director of GEC-Marconi Limited.

GEC-Marconi Sensors will continue to maintain and enhance its links with GEC-Marconi Avionics who remain a very important customer. It has also developed other business relationships both with GEC-Marconi businesses and other international companies. This growth in Sensors' external relationships must be maintained and improved.

In a statement David Laybourn said, "Sensors' future depends on understanding and satisfying its customer requirements. By becoming more focused towards customers' needs and building their trust and confidence by outstanding performance, the Company will become the preferred supplier of all the Electro-Optics and Airadio systems within its product portfolio.

"We have the opportunity to develop Sensors into a major force within GEC-Marconi and the markets in which we operate".

New Division at Rochester

With the expansion of GMAV's business in aerospace systems integration and prime contractorship, GEC-Marconi Aerospace Systems was formed at the beginning of April this year.

This new Division, with Brian Tucker as its Divisional Managing Director, will be based at Rochester and build on the skills and teams already in place for the UK Attack Helicopter and RMPA programmes.

In his new role Brian Tucker will continue to report to Dr Saul Lanyado, Managing Director of GMAV.

Procurement Review At Basildon

During June GEC-Marconi Sensors' Procurement Department successfully passed a Procurement System Review (CPSR) undertaken by the US Department of Defense. This should give the Company's Marketing Department an extra 'lever' in its bid for new government business in the USA.

Photographed with the successful procurement team is Lynn Schornak, ACO of DCMO Rochester, Dick Cohen and Steven Shea (DoD assessors) and David Laybourn, GEC-Marconi Sensors' Managing Director.

Thanks are conveyed to everyone concerned.



Cobra Venom - The Attack Helicopter Competition

Following the Government's announcement that it has selected the Westland Apache Helicopter in this competition, Dr Saul Lanyado - Managing Director of GEC-Marconi Avionics - has issued the following statement:

'I do not need to express how disappointed everyone is within GEC at this announcement. However, I would like to thank all the staff, and especially the team members, who have been involved in this project for their efforts and commitment.'

The foundations laid by the Attack Helicopter bid will now serve GMAV, and in particular its GEC-Marconi Aerospace Systems Division, well in preparing for other important contracts. We have built up an expertise that can, and will be, exploited on other major programmes.'

July 1995

Another Radar Simulator/Stimulator Success for RSD

Following the successful demonstration of a Radar Simulator / Stimulator to LORAL (see VISION Issue 8), Milton Keynes has again achieved success in completing a radar system simulator for another customer.

Again built by RSD, the Radar System Simulator forms an integral part of an Avionic System Development

Rig (ASDR) for an aircraft development programme. The ASDR provides the customer with the facility to develop the Avionics Operational Flight Programme (OFP). The aircraft's radar has yet to be selected and, consequently, the Radar System Simulator provides a generic facility.

The operator is provided with the ability to define scenario objects, such as air targets, ground targets or ground features, and position and move objects in real time according to their pre-defined flight paths.

The accompanying photograph shows Bill Morgan with the end user, viewing the simulator.



New Test Facility for EF2000 Flight Control System



(L-r) CACG Production Team, Yogesh Thanki, Peter Jarvis, Stuart Webb, Alan Wildridge, Paul Langridge. (Back row) Peter Thomas, Peter Way, from Support Division.

Combat Aircraft Controls Group has recently completed development and commissioning of an advanced ground test facility for the EF2000 fly-by-wire Flight Control System (FCS). This facility enables four Flight Control Computers to operate in parallel, exactly as in the aircraft, and will be used at GMAV Rochester by the FCS team to develop and test soft-

ware for the Flight Control Computers.

The facility, produced under contract from DASA, provides full simulation of all the inputs and outputs of the EF2000 Flight Control System and makes use of Support Division's Orion 9000 test system. Advanced system software allows fully automated computer controlled testing and results analysis.

The introduction of the new equipment will increase software development efficiency as, previously, only single lane testing could be carried out at Rochester before the software was transferred to an 'Iron Bird' test rig in Germany. The facility will also be used for complex problem investigation that was not possible with the former system.

ISO 9001: MILTON KEYNES RE-ASSESSED TO 1994 VERSION

Following re-assessment by Lloyds Register Quality Assurance (LRQA) in February 1995, Radar Systems Division (Milton Keynes) has become one of only a few sites in the Company to attain approval to Quality Management Systems standard ISO 9001: 1994.

The Division's Software and Advanced Technology areas were selected for major review, which analysed all changes in force between the 1987 and 1994 versions and verified compliance to these changes.

The Quality Management System is applicable to:

The Design, development and manufacture of radar systems and sub-systems. These include laser radars and sensors for remote sensing and identification of fixed and moving targets from airborne and ground platforms. The activities embrace hardware, software in accordance with TickIT and test facilities for the above (as complete system or sub-systems) and the provision of associated testing, repair, modification and support services.

APPROVAL FOR TITCHFIELD

June was a good month for GEC-Marconi Aerospace, Titchfield. Many months of hard work, by everyone in the Business, came to fruition in achieving ISO 9001, TS 157 and TICKIT approval.

A team of assessors, led by David Kneller from Lloyds Register Quality Assurance (LRQA), had satisfactorily completed a desk top review of the Company's documented Quality Management System in April and returned in June to assess the system in operation. On site from June 5-9, the Assessment team visited most departments, including Avery Hardoll and IPCS. Only five non-compliances were raised at the end of the Assessment and graded as 'on-going improvements' to be actioned before the first surveillance visit in December.

During the Assessment's closing meeting, the team leader commented that he was

unable to recall an occasion when so few non-conformances were raised for a business the size and with range of activities of Titchfield. He commended all involved for their efforts and commitment to achieving such a satisfactory outcome.

This is a significant achievement by everyone. However, the Lloyds team will return every six months to carry out surveillance visits with a full assessment every 3 years to ensure that the system continues to meet ISO requirements.

The importance of gaining approval cannot be over-emphasised. In an increasingly competitive market-place, many customers require their suppliers to be assessed to ISO 9001 as a pre-requisite to awarding future contracts.

CLARA Pod arrives at Milton Keynes

This important and exciting event represented the start of the System Integration phase of laser radar work. The Pod, supplied by Radar Systems Division's partner in CLARA, Dassault Electronique (DE), was one of several items delivered to Milton Keynes in March 1995.

Work is now proceeding to integrate the GMAv Sensor Head with the DE equipment, heading for flight trials later in the year on both UK 748 and French Puma aircraft.



NEW TEST EQUIPMENT FOR IN-FLIGHT ENTERTAINMENT

Representatives from several GEC Companies gathered at GMAv's Support Division in Fife recently to witness the official acceptance demonstration of new equipment to test the In-Flight Entertainment System.

This system is being produced by GMIS Inc. (GEC-Marconi In-Flight Systems) for the new Boeing 777 airliner which entered service this year.

The In-Flight Entertainment System provides pas-

sengers with access to twelve video channels, 36 stereo audio channels and telephone and networked applications. The new equipment, known as the Interactive Video System Functional Test Equipment (IVSFTE), tests the various Line Replaceable Units (LRUs) and assemblies of the In-Flight Entertainment System.

Project Leader Bob Lobban, based at Donibristle, explained that the gathering of staff from GMAv Roches-

ter, together with GEC-Marconi Defence Systems Ltd and GEC-Marconi In-Flight Systems, (two Portsmouth based Companies), was a rare occasion as everyone involved with the project had been brought together.

All involved enjoyed the opportunity to witness the Test Equipment's demonstration before its departure to GMAv Inc's Support Facility at Redmond, near Seattle, USA.



GEC Representatives gathered in Edinburgh.

GMAv teams with Honeywell

GEC-Marconi Avionics and Honeywell Military Avionics are teaming to produce a fully integrated "Look and Shoot" Helmet Mounted Cueing System (HMCS).

The result will be an affordable production ready system compatible with all models of the F-16 aircraft and equally compatible with all other tactical aircraft. It will be demonstrated on the Lockheed Martin Tactical Aircraft Company's new two seat F-16 demonstrator in 1996.

The teaming brings together two of the world's leading avionics companies, both with outstanding experience in this field. Honeywell Military Avionics will produce all the hardware and software associated with the helmet tracking elements of the system and GMAv will provide display electronics and symbol generation. Each will contribute existing flight proven helmets with the HMCS to be flight demonstrated on the F-16.

Both companies have collaborated on a number of integrated helmet programmes culminating in the recent integration of a high performance



The Helmet Mounted Cueing System is an integral part of an off-boresight missile weapon system.

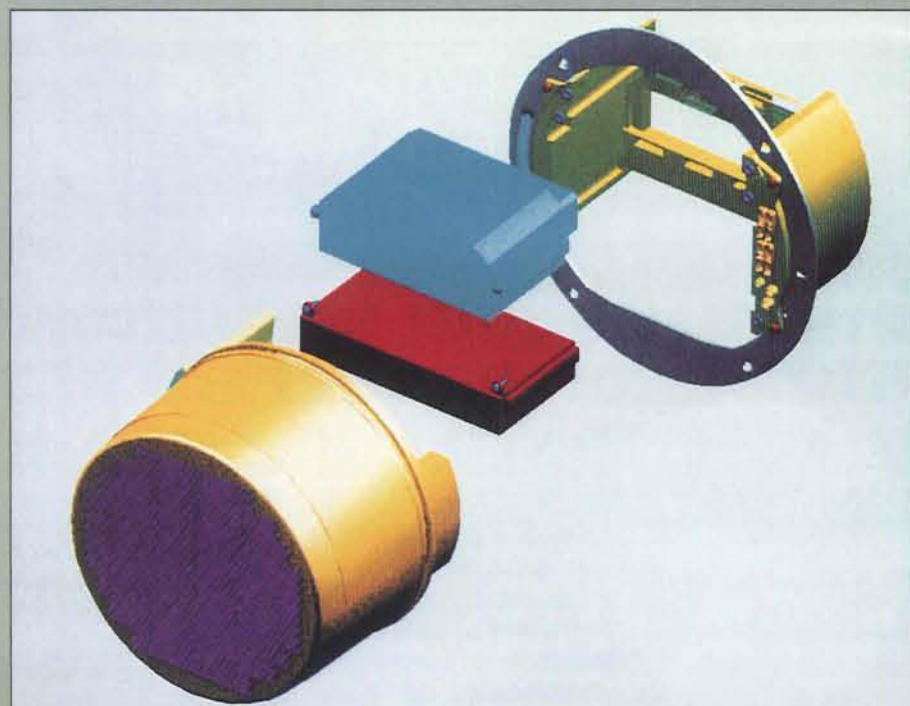
Helmet Mounted Cueing System and a Raytheon Box Office AIM-9 missile on the Lockheed demonstrator F-16B. This resulted in a very successful live HMCS firing, off boresight, illustrating the combat advantages gained by a properly implemented HMCS.

The GEC-Marconi Group has a worldwide workforce of some 40,000 people who, in a full year, sell high technology goods and services to a value approaching £3 billion.

Honeywell is a global controls company providing products, systems and serv-

ices that increase comfort, environmental protection, energy conservation, productivity and safety in homes and buildings, industry, aviation and space. The Company employs 50,000 people, in 95 countries on six continents, and had 1994 sales of \$6.1 billion.

GEC Thomson Daimler-Benz Aerospace Airborne Radar (GTDAR)



A computer generated image of AMSAAR, Airborne Multi-Role Solid State Active Array Radar.

Daimler-Benz Aerospace (DASA) of Germany is joining GEC-Marconi and Thomson-CSF of France in their GTAR joint venture aimed at European development of future combat aircraft radars. At present GTAR is executing the Airborne Multi-role Solid-state Active array Radar (AMSAAR) programme under contract from the French STTE.

The expanded programme will now be equally divided between all three companies with the work on the European Active Array Radar being carried out in Edinburgh, Elancourt (near Paris) and Ulm (Germany).

In Germany DASA have held a contract from the German Ministry of Defense for a radar technology programme called RADAR 2000 which pursues similar aims to the Anglo-French programme. The AMSAR programme, which is jointly funded by government and industry, was awarded to GTAR in 1993.

In addition to the efforts of Europe's three leading companies in airborne radar, AMSAAR also involves important participation from government laboratories, including the UK's Defence Research Agency (DRA), the Centre Electronique de l'Armement (CELAR) in France and Forschungsgesellschaft fur Angewandte Naturwissenschaften (FGAN) in Germany.

Foxhunter Milestones Achieved

Two Foxhunter milestones have recently been achieved by RSD at Milton Keynes.

First came the delivery to British Aerospace of the Carousel Radar, a commercial project, seven and a half weeks ahead of the contract requirement.

BAe needed the radar to be updated from Mod State 0 to Stage 1 Export Standard.

This was achieved as a result of exceptional teamwork within several functional groups at Milton Keynes. BAe Warton representative Richard Smith accepted the Carousel Radar on behalf of the customer.

Secondly, in March, the final delivery of the Foxhunter 395FD radars and LRUs was made to the customer.

Whilst the delivery of production mod. kits was completed last year, the radars used for development flying then had to be modified to a 2g* standard prior to delivery.

These deliveries completed the last of fourteen radar equipments to MoD and were accepted on their behalf by Mick Thurston.

The accompanying photograph shows the two official handovers in progress.



Another Milestone for Europe's Leading Supplier of In-flight Passenger Telephone Equipment

GEC-Marconi Sensors has become the first manufacturer to achieve operational status for airborne digital radios designed to meet the requirements of the pan-European Terrestrial Flight Telephone Service (TFTS).

Since February 14th, passengers on most British Airways' UK "Super Shuttle" and domestic services between London, Manchester, Glasgow, Edinburgh, Inverness, Newcastle, Aberdeen

and Belfast have been able to call anywhere in the world from the comfort of their own cabin seats. Eleven Boeing B757 and B737 aircraft operating the "Super Shuttle" and domestic services are equipped with the Company's Cabin Telecommunications Units (CTUs), to provide telephone switching facilities, as well as the digital radios.

The Company's TFTS digital radios provide up to four callers with a simultaneous

direct link to the ground telephone network, whilst up to sixteen aircraft can communicate simultaneously with a single ground station. TFTS automatically hands over calls from one ground station to another without interruption, thus ensuring a seamless service as the aircraft flies along its route. The telephone switching on the aircraft is performed by the CTU which provides all the facilities of a privately accessed branch exchange (PABX).



BA's 'Super Shuttle' domestic services are now equipped with GEC-Marconi Sensors' digital radio and cabin telecoms units.

C130U GUNSHIP - ALLTV UPDATE

At a formal acceptance ceremony at Hurlburt Field Air Force Base, Florida the 16th Special Operations Group recently took delivery of the AC130U Gunship aircraft. Numbered 1 of 13, this formidable platform is known as the SPECTRE.

The SPECTRE 'bristles' with fire power and, with the GEC-Marconi Sensors All Light Level TV system as its long range target location and identification platform, it's not surprising that opposing forces feel uneasy when the SPECTRE is deployed. The ALLTV, in conjunction with an onboard Radar/IR sensor, gives the SPECTRE the capability to track and engage two independent targets simultaneously. When this capability is combined with the fire power of a 25mm gattling gun, a 40mm cannon and a 105mm howitzer, it is of little surprise that Special Operations Forces have a 'hard punch' to deliver.

GEC-Marconi Sensors has developed the ALLTV system under contract from Rockwell International's Aircraft Modification Division based at Palmdale, CA. The ALLTV development programme has proved to be most demanding for the Company.

Its high power optical system, whilst giving exceptional stand-off range, has not only to withstand severe gunfire vibration but also to be fully operational to track and view

targets whilst all or any of the guns are firing.

Extensive aircraft trials have taken place in California at Edwards A.F.B. and the Full Scale Development (FSD) System has amassed many hundreds of flying hours without a failure. This FSD System has also been the test bed for specific ALLTV specification compliance tests and software updates. Additionally, other Systems have been used for operator training/trials at the Gunship "home base" at Hurlburt Field.

The ALLTV embodies two high resolution TV cameras manufactured by EEV (part of the GEC-Marconi Group). Capable of working from full sunlight down to starlight conditions, the Optical Assemblies for the cameras were designed and manufactured by Alpha Optics (now GEC-Marconi Avionics Inc.) of Ocean Springs.

These Optical Assemblies provide high magnification and illumination control for the cameras, as well as an optical path for a Laser Target Designator/Range-finder (LTDRF). Two state-of-the-art diode pump lasers, designed and produced by McDonnell Douglas Aircraft, St. Louis, Missouri are integrated into the ALLTV system. In addition to the LTDRF, a gated Laser Illuminator enables operation in total black-out conditions.

Sensors' design team has developed the steered stabilised platform housing this advanced electro-optical cluster of sensors. The stabilisation, target tracking and axis transformation software have been developed to provide the extreme accuracies required to control the line of fire of the powerful trio of guns. Flight trials have confirmed the Gunship's effectiveness - to quote the User, "This system provides a performance that, 5 years ago, our scientists said was impossible". However, this is only the beginning.

Following proposals submitted to Rockwell International, negotiations are now underway for Spares acquisition and 2nd Line Test Equipment and support. To date, funding of \$6M for Spares of \$1.4M for the Test Equipment support has been released by Rockwell to allow long lead items to be ordered. The expected eventual total of both of these contracts is circa \$28 Million.

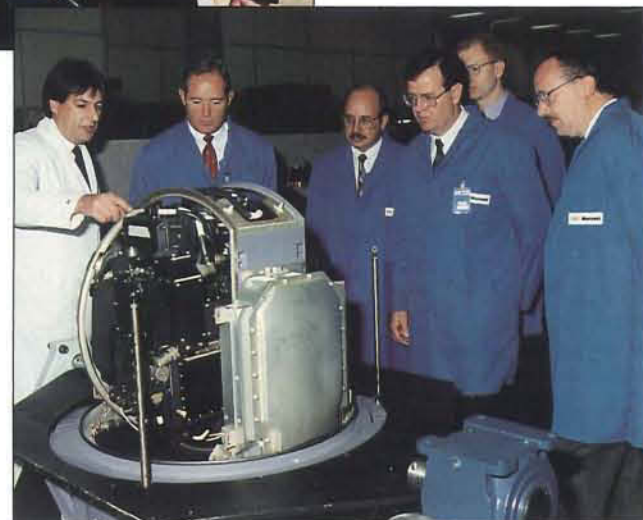
GMAV Inc. is also in final negotiations, and awaiting a contract award, for developing special support Test Program Sets (TPS) equipment with a probable contract value of \$23M. Initial dialogue is underway with the USAF for long term future Contractor Logistic Support (CLS). This, together with other activities, will entail a continued long term association with Rockwell International and the USAF into the next century. Rockwell already has international enquiries for this new generation of fast reaction, low intensity, gun platform.

On Monday 3rd April 1995, Major General James Hobson, Commander US Air Force Special Operations Command of Hurlburt Field Air Force Base, together with other USAF personnel, visited GEC-Marconi Sensors, Basildon to view the equipment still in manufacture and to discuss the project status.



(L-r) Malcolm Frost, Reg Ramm and Mel Bennett attended the formal acceptance/rollout ceremony at Hurlburt Field.

Major General James Hobson, with USAF personnel, at Basildon.



National Take Our Daughters to Work Day, Thursday - 27th April 1995

On April 27th, thousands of girls nationwide again went to work with relatives, neighbours and friends. The initiative was established to provide girls, who traditionally have less access than boys to information about the workplace, with an opportunity to observe professionals in a working environment and encouraging them to look at careers they might not otherwise have considered. For many, the day proved to be a successful learning experience.

Events took place all over the country and at both GEC-Marconi Avionics (Rochester) and at GEC-Marconi Sensors, Basildon.

The following resume focuses on their day's activities.

Rochester (45 Girls)

Forty-five 11-15 year old girls took part in this year's

National Event at Rochester. The day was designed to give an insight into a wide range of careers and opportunities by work-shadowing their parents.

Following introductions to the Company, three women employees, Ross Bell (Materials Controller) Sarah Mowatt (Cost and Budget Officer) and Tanzy Willis (Software Engineer) outlined their role and career progression. The girls were then divided into groups and briefed on the day's shadowing by (senior) female trainees.

Most of the Company's key disciplines took part and set-up tours and briefings to give the girls a greater appreciation of the opportunities which exist. Samantha and Rhianna Stuart visited the Clean Rooms where they were able to watch their father manufacturing gyros

with the aid of microscopes. He said the girls "enjoyed the experience", finding the work and factory environment very different from what they had expected.

The girls thought the day was both informative and busy. They were encouraged to talk with women at all levels to gain as much information as possible on available roles and career paths within the Company.

At the end of the day the girls attended a debrief session where (senior) female trainees helped them to evaluate the effectiveness of the day. Each girl received a certificate which will form part of their Record of Achievement.

Basildon (40 Girls)

Team spirit was again an integral part of Basildon's con-



Brian Crumbie (DSRG Production, Rochester) with Samantha and Rhianna Stuart.

tribution to the 'Take Our Daughters to Work' Campaign when forty girls joined GEC-Marconi Sensors for the day. Besides having the opportunity to get hands-on experience of some of the Company's latest equipment, team games were designed to provide an introduction to the development, production and marketing of a product.

The day commenced with a welcome, with demonstrations of equipment.

Two special team 'games' were played - the Lego Man Exercise (in the morning) and the Hotpoint Production Exercise (during the afternoon).

'Lego Man' was an exercise testing the girls' initiative, memory and ability to relay details to other team members. A coloured Lego man was built in an adjacent room to where the girls were working. The winning team was the first to build the bricks into a similar figure.

The 'Hotpoint Exercise' was a test of ingenuity and salesmanship for the girls, whereby they had to build a model washing-machine from the job description and paper provided, elect a salesman and approach the organisers and helpers to 'sell' their product. The team with the most sales, won.

A Question & Answers session rounded off the day and, judging by the girls' enthusiasm, a great time was had by all!



Basildon's visitors with Barbara Holmes, Commercial Manager, E-O Group.

THE SEARCH IS ON WHO WILL BE THE 18TH YOUNG WOMAN ENGINEER OF THE YEAR?

Young female electronic and electrical engineers interested in holding the prestigious title 1995 Young Woman Engineer of the Year are invited to apply now to The Institution of Electronics and Electrical Incorporated Engineers (IEEIE) for a nomination form.

The Award will be made to a young woman, under the age of 30, who is able to prove her ability to hold a responsible position in the electronic, electrical or allied engineering field at Incorporated Engineer level. Contenders must also have successfully completed all the required technical education and training.

Since the Award's inauguration in 1978 - eighteen years ago - the IEEIE and the Caroline Haslett Memorial Trust, who jointly sponsor the Award,

have been delighted with the high calibre of entrants. Past winners have been attracted from every sphere of electronic and electrical engineering - their success makes them ideal role models for other young women who are contemplating a career in the same field.

"We are hoping for a record number of entries for the 1995 Award", said Alan Gingell, IEEIE Secretary. "The Award attracts tremendous interest and media coverage," he continued, "and has been extremely beneficial in promoting electronic and electrical engineering as a worthwhile career for women - we are delighted to be celebrating 18 successful years."

A cheque for £750 and a silver rose bowl will be presented to the 1995 Young Woman Engineer of the Year at a special ceremony in January 1996. The

runner-up will receive the WISE prize of £500.

The Award often attracts young entrants who, whilst having completed their academic studies, have not had sufficient training and experience to be eligible for the main Award. To encourage such promising young entrants an additional prize - The Mary George Memorial Prize - will be given. The winner of this prize will receive a cheque for £250 and a silver salver.

Nomination forms for the 1995 Young Woman Engineer of the Year Award are available now - for your copy contact The Secretary, IEEIE, Savoy Hill House, Savoy Hill, London WC2R 0BS, Tel: 0171 836 3357. Please also discuss the possibility of entering with your supervisor or Training Department.

Continued from page 1

'NITE-OP' FOR POLICE PILOTS

Using state-of-the-art military technology the goggles are fitted to flying helmets, and the Devon and Cornwall Force is the first in the country to use them.

A spokesman for the Force's Air Support Unit

confirmed to a 'Daily Express' reporter that there have been significant drops in the time taken to carry out tasks at night. As pilots can now see clearly over the terrain of Dartmoor, Exmoor and Bodmin Moor in low light conditions, flying times over these distances have been greatly reduced.

The equipment is on twelve months trial in the South-West counties and is

also proving successful in terms of efficiency. Apart from the advantages of tracking down criminals, the Force has greatly enhanced its search and rescue role.

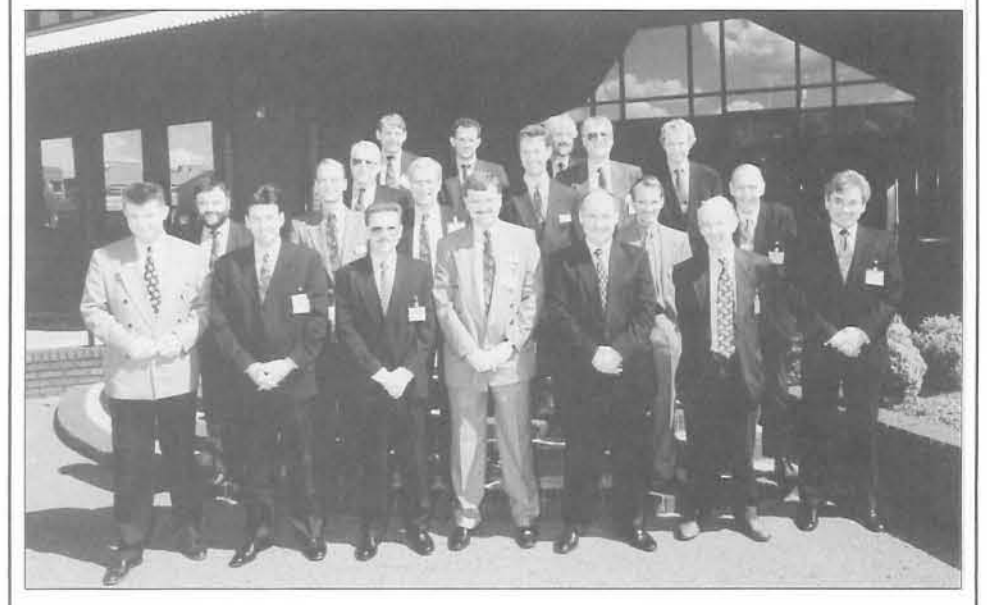
"Brilliant", is how WPC pilot Anita Williams has described the system. It is hoped that it will not be too long before other Police Forces follow the Devon and Cornwall example.

Bronze Award for DSGE

Display Systems Group Edinburgh, is the first within GMAV to receive a Bronze Award for the Business Assessment phase of the British Aerospace Preferred Supplier Process.

The accompanying photograph shows the ten man team headed by Nigel Cook (front centre) and John Lamie, Acting General Manager at DSGE (to left of Nigel), together with other DSGE Management.

The Group is working on both a Continuous Improvement Plan and Performance Measures to receive their full Bronze Award.



Environmentally Friendly Systems

Airport noise has long been a source of annoyance for the people who live and work near any major airport. To improve the people's 'lot', during the 80s the European and American Authorities introduced new regulations requiring all aircraft to conform to lower noise levels during take-off. These regulations were known as STAGE II. To meet these new levels, older aircraft required Acoustic Hush Kits to be fitted, acting like a silencer.

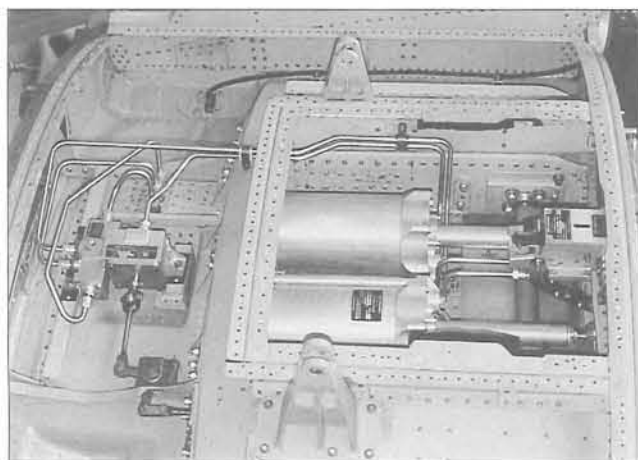
Now, to further improve the environment, new STAGE III regulations were imposed on 1st January this year.

These new noise regulations cause a further problem to the operators of old aircraft. The new generation Boeing and Airbus aircraft already better STAGE III. To enable old aircraft to continue in service, further silencing is needed. One such aircraft is the Douglas DC-8, which first flew in 1958 and the majority of which now operate as freighters in the USA and South America.

To keep these aircraft in service, GEC-Marconi Aero-

space at Titchfield has been working with Hurel Dubois to design a new Thrust Reverser. This will form the key element of a STAGE III hush kit being developed by Quiet Nacelle Corporation of Miami, USA for the DC-8. The Thrust Reverser is used, on landing, to reverse the aircraft engine thrust, thus slowing the aircraft.

The new Thrust Reverser is required for the additional acoustic (sound absorbing) panels being added over the engine's existing Thrust Reversers.



(L-r) Deploy Interlock Valve, Door Activator, Primary Lock.

The initial contract is for 10 aircraft sets with an anticipated follow-on of between 30 and 50 aircraft. Equipment for the first engines was shipped to Hurel Dubois for assembly into the first thrust reversers at the beginning of May. Qualification testing will be carried out on a new test rig at Titchfield, on a fully assembled right hand thrust reverser.

The accompanying photograph shows a deploy interlock valve, door actuator and primary lock in the DC-8's thrust reverser.

ORGAN DONOR REGISTER

Last autumn the Department of Health, launched the NHS Organ Donor Register which enables people to record their wish to be an organ donor after their death.

The United Kingdom's record on organ donation and transplantation is excellent. However, although the number of organs transplanted has increased sharply, advances in technology and the welcome reduction of road deaths have led to a drop in potential donors while the number waiting continues to rise. The shortage of organs is, therefore, serious. Organ donors already give new life to thousands every year. If the NHS Organ Donor Register can attract a minimum ten per cent more donors, the Health Service will be able to save another 300 to 500 people.

In launching the Register the Health Minister said:

"Very few of us will ever need to undergo a transplant operation. But if and when we do, we all want to be sure that an organ will be available for us.

"The NHS is entirely dependent on the generosity of individuals who agree to donate their organs.

"We always need more organ donors, and the Government has

been working hard to encourage people to make their intentions clear through the "Carry the Card" campaign. The latest phase in the campaign is the creation of a national computerised register of donors."

A recent MORI survey showed that families will almost always agree to an organ being retrieved if they know that is what their relative wanted. But when the wishes are not known, for example because the deceased was not carrying a donor card, about a quarter of all families refused permission for personal reasons. So opportunities for organ donation are being missed simply because people are not carrying their donor card.

Introducing a computer register should virtually eliminate the problem.

You can join the Register simply and easily by filling in the leaflet "LIFE - don't keep it to yourself", available free of charge by ringing Freephone 0800-555777. Alternatively, you can pick up copies from the GP surgery, your local library, post office or Citizen's Advice Bureau and return it by freepost.

Organ donors already give new life to thousands every year.

BURGER KING SUPPORTS COLUMBUS FIRE DEPARTMENT

Public donations sought to buy thermal imaging camera.

The US (Columbus) Fire Department is seeking sponsorship from businesses, groups and individuals to help purchase two thermal imaging cameras, to help them "see" through smoke and darkness.

The sponsorship campaign has been organised by Burger King, in association with Cairns & Brother, and is currently being promoted in burger outlets in the Columbus district.

Columbus Fire Chief Wayne Collins' impression of the camera is that it, "Is the most fantastic piece of rescue equipment" that he has seen during his career in the Fire Service.

The Atlanta Fire Department was the first to get the imager and is, itself, working with the Coca-Cola Corporation to purchase a further 20 systems.

Open University Successes

New Graduates

VISION has been notified of the following Open University successes within GMAV:

| | | | |
|----------------|------------|-------------------------|-----------|
| Simon Barnard | BSc (Open) | Marketing Engineer | Rochester |
| Mike Lazenby | BSc (Open) | Flight Trials Engineer | Rochester |
| Paul Newlands | BSc (Open) | Programme Manager | Edinburgh |
| Trevor Parsons | BSc (Open) | Programme Administrator | Edinburgh |

A TRAINER'S GLIMPSE OF CHINA

A Report by Hughie McArthur, Senior Instructor, at Rochester.

February and March 1995 saw myself and two colleagues on a training assignment in China. The purpose was to provide Quality Systems and MIL STD 2000 Production Requirements training to staff of the Flight Automatic Control Research Institute based in Xian. Paul Davis, QA Manager DSG(R) covered Quality Management, Brian Patrickson, Project Manager DSG(R) covered Configuration Control and I covered MIL STD 2000.

On our arrival in Xian the first thing we noticed was the large amount of dust in the air caused by the extreme lack of rain. Secondly was the road discipline. It didn't matter which way people were travelling, they all assumed they had the right of way. After all, Xian has 6 million people! Every road in Xian was packed with transport of all shapes and sizes; the bikes and cars continually dodged one another, though not successfully all the time.

New buildings were being erected all around with bamboo used as scaffolding. Most of these were to become dwellings for the local people. Off the main streets were market stalls which sold just about anything. All vehicle

repairs were undertaken on the street. With many industrial zones in Xian, numerous foreign companies are trying to get a foot-hold in the extensive market-place. Many joint ventures were mentioned in the local papers.

The facility where we delivered the training programme was part of a whole community. It contained apartment blocks for the employees, its own schools and a hospital. It even had its own rules and regulations and employed many thousands of people.

On arrival at the Research Institute we were ushered into a large room. Brian and I were sat on one side of a long table while our twelve Chinese hosts sat opposite. A video camera was trained on us the whole time and photographs were continually being taken, every word spoken was recorded. The hosts explained their needs to us and we explained our proposals to them. We were then shown around some of their work areas.

The next morning I conducted my first lecture through one of the interpreters, and was surprised to find over 40 people attending. I queried this large number with the interpreter who explained that, as well as the 14 people I was to train, additional numbers were made up

of observers. This practice was continued throughout the course. The video remained recording!

At the end of the training we had a 'wash up' meeting with their management, advising them of the way forward.

On a leisurely note, our hosts arranged a visit to the Terracotta Soldiers, a truly great spectacle over 2000 years old. Only seeing it for yourself can the magic of the shrine be appreciated.

The language barrier did not seem to cause any real problems. By communicating through the interpreter and watching the reactions of the class we could see that the training points were being understood by the students. With the help of illustrations, picture manuals and demonstrations, the training provided was a success. The Chinese are very friendly, well motivated, keen to learn and eager to improve their skills.

The hosts seemed to be very pleased with the training, even suggesting that there might be training requirements in the future. The determination to do well as an industrial nation was clearly evident.

Editorial Note

As Editor I welcome contributions for VISION and the GEC magazine TOPIC from all employees.

Your contributions should be addressed to the Site Coordinators/Correspondents - or in the case of Basildon, direct to me. The same applies to any comments, relating to the Magazine's content.

I can of course, be contacted direct:

Colin Langlands
Editorial Officer
Marketing Services Group
GEC-Marconi Sensors, Basildon

Tel: GNET Access code + 344 + 3110. Fax: GNET Access code + 344 + 3140.



Every road in Xian is used by transport of all shapes and sizes.

South Gyle Flight Demonstration is a World First

In response to the International Civil Aviation Organisation (ICAO) granting permission for Microwave Landing Systems (MLS) to be employed as a primary landing aid, Support Division at South Gyle staged a two-day MLS Seminar at the beginning of May. The Seminar was attended by 45 senior delegates representing the Ministry of Defence (MoD), Civil Aviation Authority (CAA), civil airlines and industrial interests.

For a number of years MLS has been proposed as the replacement for the ageing Instrument Landing System (ILS) currently in use at the world's major airports and military airfields. Some countries are exploring satellite technology in the form of Global Positioning Systems (GPS) as a potential future landing aid. However, in its raw form, GPS is inaccurate. Therefore, a corrected version, known as Differential GPS, has been developed.

South Gyle is a member of the European Organisation for Civil Aviation Equipment (EUROCAE) Working Group on MLS and has been involved in the development of a rigorous test capability to



The Company jet about to touch down at Aberdeen at the end of a demonstration of the tri-mode ILS/MLS/GPS equipment. The MLS ground installation is on the left.

examine interference on ILS receivers.

The first day of the Seminar was held at Aberdeen Airport which has an MLS installation capable of providing correction for GPS errors. The Company's HS 125 jet was used in a series of flights designed to demonstrate to passengers a single multi-mode landing receiver for ILS / MLS / Differential GPS approaches. The flight demonstrations were performed in conjunction with GEC-Marconi Electronic Systems.

Hosted by South Gyle's Business Manager, Dougie Berndt, the Seminar moved to South Gyle on the second day where delegates received a series of presentations, given by speakers from GMAV, GEC-Marconi Electronic Systems, GEC-Marconi Air Traffic Systems, British Airways, the CAA's National Air Traffic Service and the MoD. They reviewed the previous day's activities on a video. These had been shot on location and edited overnight by the Video Unit's Brian Godfrey.

At the end of the second day delegates agreed that the Seminar had been a success. Dougie Berndt said: "The recent ICAO decision to approve installation of MLS and allow continuation of ILS, whilst supporting development of satellite technology for future landing aids, makes a multi-mode receiver exceedingly important to military and civil users. This first-ever flight of a tri-mode receiver demonstrated the concept and capability of providing a complex receiver in an ARINC (industry standard) package".

OPTICAL ENGINEERING AWARD FOR DSG(R)

The Optics Design Team of Displays Systems Group, Rochester, recently entered an award scheme with the International Society for Optical Engineering. Their entry was for the design and development of the Combiner Element of an Off-Axis Head Up Display using Computer Generated Holographic technology.

The Group is delighted to announce that the team has been honoured with the A E Conrady Award presented "in recognition of exceptional contributions in design, constructions and testing of optical systems and instrumentation, without which the technology would not have progressed to its present state".

The Combiner Elements are used on the HUD for the EF2000 and the US F-22. The elements are fabricated at GMAV's Rochester site, this being one of only two sites approved for holographic optics by the US DoD outside the United States.

The team, or its representatives, have been invited to San Diego to receive the Award at a special Awards Banquet.



Rochester's award winning team.

DUNWOODY HIGH SCHOOL, ATLANTA, MAKES THERMAL CONTACT WITH BASILDON

Students and teaching staff from Dunwoody High School, Atlanta, Georgia have experienced at first hand the new firefighter thermal camera and display system which has been jointly developed between GEC-Marconi Sensors at Basildon and GEC-Marconi Avionics Inc., Atlanta. The students, on an exchange visit with Greensward School in Hockley, Essex, spent a day at Basildon's GEC-Marconi Sensors to see how a major UK industrial complex compares with that in the USA.

During the day the students learned why International business is important to industry, both in the UK and the USA, and how it is achieved. They were given an opportunity to see thermal imaging cameras in manufacture and talk to the people who design and make them. Presentations on the use of cameras were given by Mel Bennett and Michelle Hopkins and each student had the opportunity to try out the recently developed firefighter helmet mounted thermal camera and display system.

This life-saving system was jointly developed between GEC-Marconi Sensors and GMAV Inc. in response to

need identified by New York based Cairns & Brother.

The student exchange visits were pioneered by staff at Greensward School in their endeavour to provide more understanding on how Industry and Commerce works. In preparing the students for future life, GEC-Marconi Sensors supported this project by including visits to its own facilities supplemented with presentations on a wide range

of the disciplines. These, collectively, make a successful business.

In addition, some of the students are given the opportunity to visit a school and industry in another country where GEC-Marconi Sensors has business interests. By this means the International nature of trade, commerce, education and culture can be seen by the students and is also reflected by various curriculum

subjects undertaken in their studies. In 1989, Greensward School and GEC-Marconi Sensors were awarded the highly valued Essex County Council "CONNECTIONS" accolade for their contribution in fostering and developing all that is best in these Education/Industry links.

Girls from Dunwoody High School, with GEC-Marconi Sensors' representatives, at Basildon.



Donibristle's Commissioning Achievements

Several notable successes have been 'chalked-up' by a number of Groups at Donibristle.

Firstly, ATEs have been installed and accepted at the Royal Naval Air Station, Yeovilton, Somerset, home of the Navy's Sea Harrier F/A2 fleet. The installations for Blue Vixen radar and CCATE include upgrades to equipment capability and, following acceptance, are now complete.

Secondly, the final APAW installation and commissioning has been completed at RAF Laarbruch,

Germany. Now updated, the equipment gives full Dual Mode Tracker and 1075 Navigation System test capability for the RAF's Harrier GR7 aircraft. This is the contract's final delivery and future support will be covered by PDS work.

A third successful delivery has been the first of four Forward Looking Infra-Red (FLIR) Test Systems for the Tornado, GR4. The system's acceptance testing has been completed at 30MU RAF Sealand, near Chester.

Well done to everybody involved in these projects.

TORPEDO TEST TEAM WIN SPRINTS

Support Division at Donibristle has recently won a contract to supply eight core Automatic Test Equipments to GEC-Marconi Naval Systems in support of their SPRINTS (Spearfish Reconfigurable Integrated Test Solutions) programme. This success was achieved despite considerable competition.

The successful team, under the leadership of Project Manager Alan Lowes, will now direct its attention to winning the Test Equipment bid for the Royal Navy's other torpedo programme, the Sting Ray Life Extension contract.

VE-DAY Anniversary

VE-Day celebrations came to Rochester by courtesy of Ivor Hodge, from FSP Production, a collector of military vehicles. 1940s wartime music was played for most of the day, with lunch-time jiving enjoyed by members of staff.



St Lucia Wedding

Sue Rogers joined the Company in November 1993 as Finance Controller for Support Division, Rochester, moving in this capacity to Displays & New Ventures after Tim Brammer's move to Basildon in June 1994.

In February this year, Sue visited the island of St Lucia and, whilst there, married Barry Halsall on St Valentines Day. Prior to her departure, David Frost presented Sue with a gift of saucepans and - so it is rumoured - a much needed cookery book from friends and colleagues!

The accompanying photographs show (i) the presentation and (ii) the wedding.



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25 Years Service

25 Years Service presentations were recently made to three dedicated employees who joined the Company in 1970.

Clive Baker
(Project Leader)



Upon leaving the RAF, where he had been involved with Vulcan bomber avionics, Clive's initial employment with the Company was in the Inertial Navigation Division (IND), working on Jaguar Navigation and Weapon Aiming Subsystems. He became part of IND's Jaguar flight-trials team at Warton and in the

USA where the Jaguar underwent hot and cold weather trials. Clive enjoyed working in locations such as Florida, but was not too happy about the cold lake locations in Alberta!

Upon Clive's return to IND in 1975 he became involved in the development and commissioning of the Nimrod Central System (NCS) and, in the following year, took overall charge of the GTS IFU. This is a role with which he's still associated.

Since 1976 Clive has played a significant part in the development of additional products, such as Digital Maps and 'Spartan'. However his main-stream has always been CTS where his detailed knowledge and experience are proving invaluable.

To mark his 25 Years Service, Clive chose a selection of power tools as his gift from the Company.

Robin Fulton
(Principal Systems Engineer)



Robin joined the Company as a 3-year Student Apprentice at Hopewell Drive, followed by periods in the Gyro and ATE Divisions. It was whilst in ATE that he produced his first circuit design.

In 1973 full-time employment commenced in the Airborne Displays Division, working on various Head Up Display programmes.

Robin's expertise was quickly recognised and he was instrumental in the development of the symbol generator for early HUDs. These became the basis of future systems, such as the F-16A/B.

His career progressed and he was soon given overall responsibility for the hardware design of the follow-on F-16 C/D HUD System programme. To this day he is the 'Guru' of the F-16 avionics system.

Robin subsequently moved on to Symbol Generator ASIC design and development with the design of the "Chip 1 and 2 Symbol Generator", which he later converted to a single-chip ASIC. This is now the mainstay of advanced Symbol Generators as used on the EFA CSG and F-22 HUD.

The Company presented Robin with a TV in recognition of his service.

London to Brighton

Mark Beattie, a Production Engineer in FSP, took part in the London to Brighton Bike Ride on 18th June. Together with his brother-in-law he raised over £1,100 for CLIC UK (Cancer and Leukaemia In Childhood) trust. Mark was part of a 100-strong team from GEC-Marconi Avionics at Rochester.

Mark's son, Christopher, is suffering from a rare form of childhood cancer called Neuroblastoma. He is being treated at Great Ormond Street Childrens' Hospital.

All routine tests, injections and blood samples can now be carried out at the child's home in familiar surroundings by a domiciliary care nurse. Two of these nurses, attached to All Saints Hospital, Chatham, form part of a

team of specialist nurses created by CLIC. These nurses soon become part of the family and the benefits to both child and parents is considerable.



Mark (r) with his brother-in-law at the end of the ride.

Open University Success

VISION Issue 8 reported on a number of Open University successes within GMAV. The Editor has now been informed that Simon Barnard - Senior Marketing Engineer with Repairs and Spares Department, Support Division, Rochester, graduated with his BSc.

Simon's achievement follows six years dedication to studies and the Company congratulates him on his success.

C.T. (Jock) Martin

(Prod'n Technician
Leading Hand)



Jock started his employment in the CMS Paint Shop as a Stove Enamel Sprayer, becoming a Leading Hand in February 1985.

His job title changed to Prod'n Technician Leading Hand in April 1989 and, four years later, he transferred to FSP Production in the same capacity.

It is to bring this level of care to all children suffering from cancer that CLIC UK has been formed. The money raised by Mark has really gone to a good cause.

A HEALTHY 'WRINKLY' RUNS THE MARATHON



Brian Ellender, Project Controller in Support Division (Rochester) took part in, and completed, the Nutra-sweet London Marathon on April 2nd.

Brian, 61 years young, completed the course in 4 hours 29 minutes and raised £320 for the charity SENSE, the Deafblind & Rubella Association. Our photo shows Sue Turner receiving the cheque on behalf of SENSE Kent Branch.

It was 11 years ago that Brian last ran in the Marathon when he completed the course in 3 hours 45 minutes. A quick calculation shows that his time has slowed down by 4 minutes a year.

When asked what he considered to be the worst part of the course Brian's response came as a surprise, especially as it occurred after the race

had ended. He said that, after crossing the finishing line, all he wanted to do was rest, but competitors were instructed to "Hurry along" into the funnels for recording purposes and to collect their medals. He added that, at this point, his legs just didn't want to respond to the request to move, let alone hurry!

Another experience occurred on his way home, on board the train as it arrived at Chatham Railway Station. This time his whole body seemed to go on strike when he tried to alight.

However, on Monday morning - with his medal on display - Brian was 'hail and hearty'. Having completed two Marathons and two parachute jumps, one wonders what he plans to do next.

Well done Brian.

LONDON MARATHON

In addition to Brian's achievement a further five employees from Rochester competed in the London Marathon.

Ken Rains completed in his 8th Marathon, and was extremely pleased with his time - breaking the 3 hour barrier for the first time. Ken recorded a time of 2 hours 58 mins, raising £300 for the British Heart Foundation.

Ben Matthews participated in his 3rd Marathon, and recorded a time of 3 hrs 24 mins. Ben raised funds for the Kent Air Ambulance.

Gary Lambkin ran his first Marathon, and was very pleased to complete the distance in a time of 3 hrs 58 mins.

Bob Kemlo, also having completed the tough Snowdonia Marathon on a number of occasions, was next home in a time of 4 hrs 22mins. In the two weeks prior to the Marathon, Bob decided to raise money for Muscular Dystrophy and collected £100.

Alan Hindlet ran his 16th Marathon supporting his favourite charity, The Guide Dogs for the Blind. Alan's time was 4hrs 22mins, and raised £260 in sponsorship money.

The weather was not ideal for long distance running. On

Interdivisional Cricket Competition

The 1995 season heralds the fourteenth year of the Inter-Divisional Cricket Competition, in its current form.

Through this Competition, due (in the main) to the individual efforts of the Social Club's Committee members and Cricket Section co-operation, many Social Club members are afforded an opportunity to play cricket.

The strength of the game owes as much to those at the grass roots level as to those

at the top - in the light of the performance of the England touring side last Winter, the game warrants as much support as can be obtained!

Registration forms are available from the Divisional Administration Departments, or directly from the following Interdivisional Cricket Committee members:

D. Harman,
A. Poat,
K. Washington.

Nailsea Retirement

Peter James retired from GEC Marconi Oil & Gas on 24th March after nearly 10 years service with the Company, during which he worked in Stock Control.

In the last year Peter has undergone major surgery but this has not stopped him pursuing his love of cycling.

He is now looking forward to a holiday in Turkey with the Rotary Club, undertaking charity work and continuing the cycling.

The accompanying photograph shows Alan McGovern, OCG Nailsea, Operations Manager congratulating Peter on his retirement.



ANNE BILLING

Anne Billing retired from GMAV, Rochester on 3 March 1995 after completing 24 years continuous service.

Anne joined the Company in June 1970, initially as Secretary within the Inspection Department of FUZE Division, but later transferred within the Quality Assurance Services of FUZE. In December 1972 she became Secretary to the Quality Assurance Manager of Inertial Navigation Division.

In April 1975 Anne moved into the MEA Admin Department as Confidential Secretary, and, during the late 1980s, worked for Brian Tucker and Bob Wilkinson at the same time.

Anne's last eight years with the Company were spent as Confidential Secretary to Bob Wilkinson, who declared that he will miss her calm manner in resolving daily problems with the minimum of fuss!



Anne receives her retirement gift from Bob Wilkinson.

GMAV Rochester Sports & Social Club DATES FOR YOUR DIARY

| | |
|---------------------|---|
| 3 SEPTEMBER | Boot Fair |
| Time: | 8.00am - 1.00pm |
| Cost: | £5 per pitch to sellers, free entry to customers. |
| 9 SEPTEMBER | Parlour Derby - Filmed Horseracing |
| Time: | First race commences at 8.00pm and "they're off" until 11.00pm. |
| 23 SEPTEMBER | OVER 20s Disco - 'State Line' |
| Time: | 7.30pm - 11.00pm |
| Cost: | FREE FUNCTION |
| | Entry free to members, guests to pay 50p. |

Members can sign in up to 3 guests.

The hall can be booked for £100 + £50 returnable deposit if no damage incurred.

| | | |
|-------------------|------------------------|----------------------|
| Bar Hours: | Mon, Wed, Fri | 12.00-2.00pm. |
| | Sat & Sun | 12.00-3.00pm. |
| | Mon-Sat evening | 6.00-11.00pm. |
| | Sun evening | 7.00-10.30pm. |

News/Diary Dates from around the Sports Sections will follow in the next edition of VISION.

Two Manufacturing Stalwarts Retire



Stan Wells and **Peter Burrows**, with over 50 years of Production Management at Rochester between them, have retired from the Company. During their employment they both saw, and were responsible for, considerable change and evolution in the site's Production facilities. Having started with one small Aviation Division in the fifties and sixties the facility developed during Rochester's growth to over 12 individual Production organisations and, during the nineties, these have been consolidated into the one main manufacturing unit.

Stan joined the company in 1959 as a Technical Writer. Persuaded by Alf Harrison to enter the world of Production Management, he was made an Assistant Production Manager of Flight Instruments in 1963. Stan continued in Production Management, in both the Instrument Systems and Combat Aircraft Controls Divisions, until his retirement.

As a keen sportsman Stan played cricket for the Alf Harrison Eleven. Now, during retirement, he expects to get more use out of his caravan than he has for many years!

Peter re-joined the Company in 1967 as a Production Engineer and later that year was promoted to Production Manager of Automatic Test Equipment Division. In 1978 he transferred to the Central Machine Shop, taking over the position of Manager until his retirement. During this period Peter introduced the Computer Control facilities into the Machine Shop that are used today.

Away from the 'suds and swarf' Peter intends to spend many retirement hours working in his garden.

The accompanying retirement photographs show (i) Stan, and (ii) Peter, with Production Director John Clover.



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