

Over £35m of contracts won for the RAF Tornado Mid Life Update Programme

GEC Avionics has received contracts valued at over £35m for four systems for the RAF Tornado Mid Life Update (MLU) Programme.

The contracts cover the supply of recording and replay systems, an updated weapons control system, and the world's first contract to supply a terrain referenced navigation/terrain following system.



The RAF Tornado IDS.

Recording Systems

Two contracts, placed with the Company's Recording Systems Division, cover the development and manufacture of new systems: an advanced Video Recording System (VRS) and Ground Replay Facility which records and replays data displayed on the pilot's head up and head down displays; and a Computer Loading System (CLS) which simplifies the task of entering mission specific data into the aircraft's computing systems.

These products represent the latest developments in a range of military and rugged industrial recording products developed by Recording Systems Division at Nailsea.

These awards reflect the company's commitment, past, present and future to the Tornado aircraft.

An Updated Weapon Control System

The Company is to update its existing Weapon Control System which already equips the Royal Air Force and Royal Saudi Arabian Air Force Tornado IDS aircraft.

The Tornado IDS Weapon Control System consists of eleven separate pieces of equipment of which two are to be changed – the Weapon Programming Unit and the Weapon Control Panel.

This contract will involve the incorporation of updated electronics and a customised control panel which will reduce the pilot's workload and lead to more efficient weapon delivery.

SPARTAN TRN/TF System – A first for GEC Avionics

Equipped with SPARTAN, the Tornado IDS pilot will be able, for the first time, to fly at low level with great accuracy, without using external navigation sources or activating his radar. These capabilities will considerably enhance the ability of the Tornado to remain undetected when operating in the modern, hostile electronic warfare environment.

Developed jointly by Combat Aircraft Controls, and Guidance Systems Division, SPARTAN has been flight tested on a wide variety of military aircraft in the United Kingdom and the United States of America. Early developmental flight tests at RAE Farnborough and Bedford have been followed



SPARTAN will enable the pilot to fly undetected and with great accuracy at low level.

more recently by operational proving tests on Tornado aircraft in the UK and the

Advanced Fighter Technology Integration (AFTI) F-16 in the USA.

US NAVY AND MARINE CORPS SELECT GEC AVIONICS 'CATS EYES' NIGHT VISION GOGGLES

GEC Avionics revolutionary 'Cats Eyes' Night Vision Goggles (NVGs) have been selected as the standard NVG for all United States Navy and Marine Corps tactical fixed wing aircraft.

Airborne Display Division

The Editor regrets the late arrival of this issue

In the final stages of production he was compelled to take sick leave but hopes to return to work as soon as possible. This front page has been prepared for him by colleagues.

GEC Avionics to supply pilot's control sticks for next generation US Navy and Air Force fighter aircraft



The Lockheed/Boeing/General Dynamics YF-22A.

GEC Avionics was awarded a contract late last year for the Pilot's Side Stick Transducer Assembly for the Lockheed/Boeing/General Dynamics YF-22A – a contender for the USAF Advanced Tactical Fighter (ATF).

A second contract has now been received for the 'primary

flight controller' for the US Navy's A-12 aircraft.

Both awards were made to Combat Aircraft Controls Division, and reflect the company's commitment to developing safety critical pilot's controllers for the world's most advanced aircraft.

CHINESE ORDER £30M WORTH OF EQUIPMENT

The Peoples Republic of China have placed an order with the company valued at £30m for head up displays, air data computers and radar equipment.

The order is the third for these systems and brings the total value of orders placed with the company to £110m.

The equipment being supplied has been designed by the company specifically for the Chinese Type 7 aircraft and illustrates the success of the company's long term collaboration with the China National Aero Technology

Import/Export Corporation (CATIC).

CATIC has the responsibility, on behalf of China's Ministry of Aerospace Industry, for the import and export of aircraft avionics. Working with our agents in Beijing, Jardine Matheson, the company has established one of the most successful high technology ventures between China and the West. This collaboration has encompassed the supply of equipment, training, support of flight trials in China, and the setting up of local production facilities.

have received an order for 83 sets of goggles worth in excess of \$6m. This contract awarded by the US Navy also incorporates follow on options for a further 245 sets of goggles. (This order up-dates the story on Page 4).

The award results from extensive flight trials on a number of aircraft and helicopters in the United States, including all the US armed services, and follows two years operational service with an A-6 'Intruder' Squadron.

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 Volunteers should offer their service through Divisional Administration Officers or direct to the Editor.

Editor's Notice Board

To Friends and Colleagues of Ted Cesana

My wife and I thank all of you for the kindness and consideration shown since I was taken ill in February 1988, and for the wonderful presentation made to me on the date of my retirement (19th January, 1989). I regret time did not permit me to say farewell to everyone personally, to those I missed may you read these few lines of appreciation.

*With Best Wishes and Kindest Regards,
 Ted Cesana,
 ADD Engineering F-16 Project.*

REPORTING SICKNESS

PLEASE NOTE

The telephone number for reporting sickness to the Surgery is now **MEDWAY 816194**
 Please do not use the previous number 826124 as this is now a private line.

ROCHESTER VETERANS CLUB

We have received this letter from Bruce Cochran who will be remembered by many from his time in FCD Production.



And here are some of the members, who have worked in GAV. (L-r) Tom Southworth, Joe Southworth, Ted Cesana, Bruce Cochran and Ken Goodhue. Alan Waters was not in for the photo.

ROCHESTER VETERANS' CLUB

UNION STREET ROCHESTER KENT

CLUB OPENING HOURS

Every weekday afternoon from 1.00 pm to 5.00 pm

Thursday evenings from 7.00 pm to 10.00 pm

The object of the Rochester Veterans' Club is to provide facilities for recreation for men over sixty years of age although the committee has the power to elect men under that age in special cases.

The Club has been in the present building since 1945, and is sponsored by the Rotary Club of Rochester. There is, at the moment, a membership of about 70.

There are three full size snooker/billiard tables, card tables for Fiches, Whist or cribbage, or whatever else you would like to play there's a dart board, a TV set (tho' that's a bit dodgy at the moment) and a radiogram.

Tea and coffee are available at 10p and 15p respectively and a gas cooker in the kitchen if you want to warm your own meal.

There are occasional 'open days' when there are challenge games against other Clubs (on a friendly basis) and the Club gets quite involved with the Council, during the Medway Festival week, and on other civic occasions.

Membership is at the moment £1.50 per annum, and members wishing to play snooker pay 10p per frame each.

There is ample private car parking, and it can be arranged to allow members to park there outside Club hours.

Come along to see us we are not a lot of old codgers and have a very friendly and pleasant time together. I can assure you, you will be given a very warm welcome

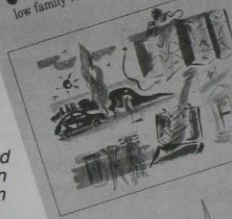
Remember ANY weekday afternoon or ring me.

Bruce Cochran
 Hon. Secretary

184 The Tideway,
 Rochester,
 Kent. ME1 3QE
 Medway 402711

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Details and application forms from Di Bower, Ex. 3417.

BUPA Travel

The GEC Han AND SELECTED BENEFIT SCHEME

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Choose the right route for a better retirement

There have been considerable changes in the realities of retirement over the last few years. Have you made your pension choice? Are your existing pension arrangements adequate, or do they need a boost? For further details on both the GEC Pension Plan and Selected Benefit Scheme, contact Di Bower, Employee Benefits Officer, in Personnel on Ex. 3417.

ROCHESTER-UPON-MEDWAY CITY COUNCIL

THE CITY TREE Appeal

This Certificate is presented to G.E.C. Avionics, Chatham in recognition of their contribution towards the replacement of trees lost in the Great Storm of 16th October 1987.

The Right Worshipful the Mayor of Rochester-upon-Medway

Panto and Party for the Mentally Handicapped Children

MAYOR'S PARLOUR
 Gillingham Borough Council
 Municipal Buildings Gillingham Kent ME7 5LA Phone Medway (0634) 50021 Fax (0634) 070833

1st February, 1989.

Dear Mr. Collins,

My wife and I were among the guests on Saturday last at the Christmas Party held for the Medway Society of Mentally Handicapped Children in your Centres.

It is indeed heartwarming to know that such a large industrial concern takes interest in supporting these youngsters, all of whom had a wonderful time - as did my wife and I. Please accept my warmest congratulations for the sterling efforts put in by you and other members of staff and for the way in which they so selflessly gave their free time to look after their guests. Well done!

Yours sincerely,
 John Payne
 Mayor

A particularly warm thank you is due this year to everyone who performed, prepared, and helped in any way - since this year's event at the end of January was the twenty-fifth party.

All who contributed time and effort should consider themselves as recipients of these two letters. Well Done all!

Medway Society for Mentally Handicapped Children
 Belmont House, Westwicks Road, Gillingham, Kent

1st February, 1989.

Dear Mr. Collins,
 Social Secretary,
 G.E.C.,
 Airport Works,
 Rochester,
 Kent.

Dear Jim,
 May I, on behalf of the above Society, thank you and your colleagues most sincerely for all the hard work that you put in to make our annual party such a great success. Please convey our thanks to all concerned and we all enjoyed a very happy 25th Anniversary at G.E.C.

Yours sincerely,
 Joan Metcalf
 Social Secretary

The Charles Berry Shield

The fifth Award for Quality Assurance Apprenticeship of the Year was presented by its sponsor Charles Berry to the first young lady to receive the distinction.

Karen Lamb, now Technical Assistant in ADD QA, heard the selection panel's decision on her 21st birthday. Karen completed her Technician Apprenticeship last September, during her training she spent periods in ADD Model Shop, ATED, ADD QA Laboratory, Production Engineering and finally the QA Department where she now is.

Part of her spare time is spent as Secretary to the Medway Lions (Young Lions).

At the presentation ceremony headed by Assistant Managing Director Ray Reese in his capacity as Quality Director, Karen was congratulated by Charles Berry (previously on-site representative of the US Department of Defense).

Looking on were this year's runners-up Paul Bainbridge from MASD QA, with a number of Karen and Paul's colleagues and QA Managers. "A worthy candidate" said Charles Berry, seen here handing over the Shield.



Obituary

Mr. A.E.I. Newman, known to his many friends and acquaintances at the Rochester site as 'Percy', died suddenly at his home in Gillingham on November 29th. He was aged 67 and had worked for the Company for 30 years before retirement in 1984.

To all those who knew him during his many years at Rochester he was a veritable font of knowledge, always ready and willing to offer his friendly advice and assistance to anyone with a problem.

He will be remembered with affection and most sadly missed.

R.E.W.

A much-loved 'Tea Lady' in the Towers, Elsie Bunting died on February 1st at the Molly Wisdom Hospice. After retiring in April 1985 and working on the Temporary Pool until the next year, Elsie had been keeping in close touch with the many friends she made during her twenty years with the company.

Prior to spending around ten years looking after company managers, Elsie was in the Canteen.

CENTRAL CHARITY FUND

Donations approved by the Committee in the last few weeks have gone to a very wide range of local causes.

Existing contributors and potential new members (who should contact Julie Stott in Personnel for information about payroll deductions, Ex 3776) should be interested in this list.

THE CHATHAM MARINES CADET UNIT were awarded £25 towards their Christmas Draw.

MEDWAY TOWNS & DISTRICT SPASTICS SOCIETY was awarded £125 towards money being raised by a sponsored snooker competition.

THE CHATHAM CARERS' RELIEF SERVICE which offers help and support to those who care for mentally handicapped adults living at home in the Medway area, was awarded £100.

THE MEDWAY FAITH AND LIGHT GROUP, which provides a service for local mentally handicapped people, was awarded £100 towards the purchase of a minibus.

THE KENT ASSOCIATION FOR SPINA BIFIDA was awarded £150.

ALL SAINTS HOSPITAL SPECIAL CARE BABY UNIT was awarded £100. This was to supplement over £300 raised by four members of FCD on a sponsored walk.

KENT CONSTABULARY were awarded £50 to supplement money raised by a sponsored drive to purchase specially adapted computers for the Spastics Society.

£200 was awarded to the LIVINGSTONE HOSPITAL at Dartford for the purchase of a special mattress used in the care of the terminally ill.

GILLINGHAM BAPTIST CHURCH received a donation of £100 towards the refurbishment of their church kitchen where lunches are provided on a daily basis for local old age pensioners.

The GILLINGHAM SOCIAL EDUCATION CENTRE were awarded £100 towards a planned summer holiday for a group of mentally handicapped people.

DUBAI '89

The first aerospace exhibition and conference held in the Middle East on a large scale including military aircraft and a flying display - Farnborough style - was held in Dubai, United Arab Emirates, in January. The verdict of exhibitors and trade visitors, quoted by a local source, was that the show has established itself as the fourth major venue for air shows worldwide.

GAV was well represented

with a team led by Ron Britton, Assistant General Manager, supported by Di Firth in charge of our exhibition arrangements, Tony Sim also from Exhibitions Dept., Peter Rowell from GSD, Ian Hunter recently appointed Area Manager, Brian Ashley Area Manager, and Jim Gardner, Director of Marketing for our associates Developmental Sciences Corp., Los Angeles. Jim Lopez represented GEC Sensors.

BUT NOT THIS ONE!!

ATHLETIC UNION University of * * Students Union

From * * * University Boat Club Our ref: Ergomaniacs in Space

Dear Sir/Madam,

We, the members of the U.B.C. are organising a major fund raising event on the 6th, 7th and 8th of March. The event is to be in the form of a 48 hour sponsored row on an ergometer (rowing machine) with our progress being charted as a trip to the satellites, reaching an altitude of approximately 700 KM (LANDSAT 5) breaking major altitude records on the way, with a slide show giving views from aircraft and satellites at the corresponding heights.

We hope to raise money mainly from Company sponsorship with over 80% of the proceeds going to a Childrens Cancer Ward in * * * General Hospital. The remainder is to be used by the Boat Club towards the purchase of urgently needed equipment. We are asking Companies who are associated with the University through academic sponsorship, employees, research etc and Companies who benefit from the custom of the University and the students. We are aiming at high media coverage and are confident of coverage by TV and all the local and regional newspapers.

Any support from your company, financial or in the form of your products would be of great help and larger contributors are invited to send an advertising logo, which will be displayed at the two day event, although all contributors will be acknowledged and thanked in a local newspaper. Please make cheques payable to the U.B.C

We eagerly await a favourable reply.

Yours faithfully,

Z Z Z Z

on behalf of the Committee

Congratulations

BIRTH

On 17th February, to Joan and 'Hughie' McArthur, a son Mark. Hugh is of course well known to many intakes of apprentices and also as a member of the GAV/BP Club Management Committee. Best wishes from a host of friends and colleagues.

Dear Sir
Thank you for your letter requesting sponsorship for your Ergomaniacs in Space fund-raising effort.

We receive many requests for such sponsorship and are obliged to confine our responses to local activities, so I regret that I am unable to help you.

Wishing you every success in your fund-raising and your entry for the spelling competition.

Yours faithfully

L Hampson
Secretary, Company Donations
Committee



One VIP visitor to our stand was the UAE Defence Minister, Sheikh Mohammed Bin Rashid. In the picture he is talking with Peter Rowell (GSD Marketing Manager) and Dr. Gardner from DSC (right).

CHESS PROBLEM

White to play and mate in two moves



Solution on Page 8



Earlier, in an appropriately clad departure from ATED, Ian Hunter received the best wishes of his colleagues from Geoff Hanks, Marketing Manager.

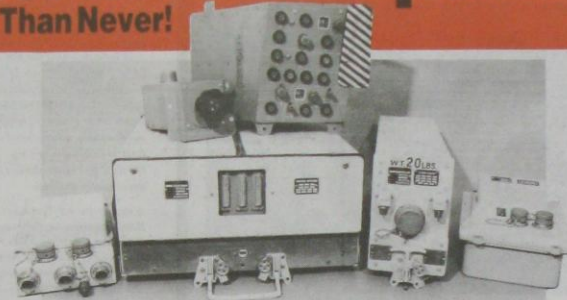
A look into the past

Better Late Than Never!

Some 24 years after the TSR2 programme was cancelled, GEC Avionics has made a delivery of TSR2 equipment to the RAF.

During a visit by the Royal Aeronautical Society, Medway Branch, to the RAF Cosford Aerospace Museum, the curator Len Woodgate asked Branch Members for help. He has a TSR2 airframe, which quite literally fell off a lorry and ended up in the Museum (See other story). Unfortunately all the avionics, engines and internal fittings had been removed prior to its arrival at Cosford. Could the Branch and GEC Avionics help fill some of the yawning gaps in the airframe?

All the darkest corners of Marketing Department, Sales Model Stores and Exhibitions Department "black-holes"



Technology and packaging of the 1960's.

were searched with some surprising results.

The final tally included a flight control computer, air data computer, pilots control panel, roll and yaw gyros, and a ground test switch.

Similar efforts by other ex-

TSR2 contractors and at RAF stores have uncovered engine exhaust ducts, ejector seats and even complete engines. Yet again GEC Avionics provided the goods and satisfied a "customer".

Now, does anyone know of

a good home for the prototype C-5A EMAC unit?

The Company has received a letter (to Alan Briggs) thanking us for finding and providing the equipment for the Aerospace Museum from the Curator, Len Woodgate.

TSR2

When the TSR2 contract was awarded in 1961 it was conditional upon three great aircraft companies, Bristol, English Electric and Vickers forming the BAC Group. The aircraft design was very close to one which English Electric had originally put up to the Ministry but BAC, formerly the Vickers factory, had design leadership.

The TSR2 was conceived as a weapons system, which meant that the airframe was merely the means of carrying and delivering a weapon onto its target, the navigation and attack systems integrated through central computers were the primary means of achieving this weapons delivery.

There is no doubt that the specification for TSR2 required an extremely sophisticated aircraft to achieve all the things in the requirement. This was to perform a mission that required supersonic cruise at high altitude followed by a rapid descent to low level terrain following, before the final run to the target, this added to a demand for short take off and landing and the ability to operate from poor or semi-prepared surfaces, made it very difficult to achieve. The need for TSR2 to operate from damaged

or emergency airfields required that the aircraft should be self contained and able to start without outside aid, this meant that the aircraft had to be provided with an auxiliary power unit which could also be run on the ground to provide power and air conditioning for the aircraft. In addition TSR2 had "two of everything" to ensure that it would never be disabled by a single failure which meant that everything was expensive, heavy, and bulky. With two fuel pumps and two hydraulic pumps all able to cross-feed to operate the systems, and a fuel control system which was also supposed to balance the aircraft, the system was extremely complicated. The duplication even extended to the weapons system, in that two central computers were fitted. With so many duplicated systems the central cockpit warning panel contained 48 warning lights!

The development programme called for 9 prototypes followed by 11 pre-production aircraft. The first flight aircraft (XR219) was assembled at Boscombe Down early in 1964 but the first flight was delayed by a series of engine vibration problems. It was eventually found that this vibration problem was caused by the fuel pumps on the engines. The actual flight programmes were delayed by a series of misfortunes not the least

of which was a severe shimmy on the undercarriage. The other problems included a lack of flight cleared engines and the fuselage of XR220 being deposited on the concrete when the vehicle was backing into the hangar; also a heavy series of modifications which were introduced whether or not they affected the aircraft's airworthiness. By early 1965 there were three aircraft in essentially flying condition, six more were in an advanced stage of completion and major components were available for several of the pre-production batch. Nevertheless the Government cancelled the contract, all the jigs were torn up and cut to pieces, as were all the aircraft except the first three which ended up, one at Foulness Guntery Range, one at Cosford, and one at Duxford.

Without this cancellation it is certain that the TSR2 would have been in RAF Squadron Service before 1970 and they would have had an aircraft which could fly over a thousand miles, much of it at low level in zero visibility, and deposit a bomb within a few yards of its planned target. Even in the early days plans were already going through the project office for an all weather fighter version.

The TSR2 development programme suffered by being split into the hands of three separate aircraft companies with design

leadership being given to one firm with the obvious problems this would cause in liaison. It also suffered from too many contradictory requirements and with so much equipment being loaded onto the programme at its concept. The flight programme was delayed and a three month gap between the aircraft's first and second flights raised public doubt. The RAF ended up with a long period of obsolescent aircraft in its front line and this would have been avoided had the TSR2 been allowed to continue.

Information provided by the Curator of the Aerospace Museum, Cosford.

The Museum, at RAF Cosford, Wolverhampton, provides a fascinating visit for the family if you are travelling north or to north Wales.

Besides TSR2, you can see the world speed record (1953) holding Hunter, and the Fairey Delta 2 which in 1956 took the record up to 1132 mph. There is a fine collection of WW2 aircraft, and civil aircraft from Comet to Concorde, with exhibits depicting the evolution of British Civil Aviation from 1919. Also many military aircraft, rockets, missiles, and a fine collection of engines.

The Cosford base is also famous for its indoor athletics facilities.

YOUR WALL POSTER



This year's colour poster features ADD's Cats Eyes night vision goggles, worn by a test pilot in the eerie glow of the NVG-compatible cockpit lighting in a prototype upgraded McDonnell Douglas AV-8B, under evaluation for the US Marine Corps "Night Attack" programme. Cats Eyes is one key item in the system which was successfully tested in over 300 sorties completed in May last year, at various US bases including China Lake and Patuxent River. A great deal of on-the-spot support has been given on this programme by engineers from both Rochester and Atlanta.

Night-vision goggles were originally developed for use by ground forces, and were only later employed by helicopter aircrews. NVGs were successful in this role, and so their use was further extended to embrace trials with high-performance fixed-wing aircraft. These trials were conducted both in the US and in Europe and included such projects as the Royal Aircraft Establishment's Night Owl and the US Navy's Cheap Night projects. These trials led to a fully-proven and productionised night vision goggles system, named Cats Eyes by GEC Avionics, which has an optical combiner for each eye. Conventional NVGs of the binocular type do not permit a direct view of the outside world, so that the pilot has to monitor cockpit instruments by looking round and under the goggles, preventing the use of any peripheral visual cues which are outside the instrument's field of view.

With the Cats Eyes system the images from the two visual input paths, one direct and the other from the inter-

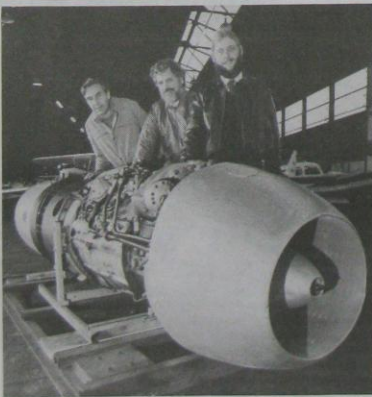
combiner, are registered in a 1:1 relationship and so complement one another. The advantages of this arrangement have been established during extensive low-level night-flying trials (referred to above) involving a fully integrated night vision cockpit, with compatible lighting, conventional raster-scan head-up display (portraying infra-red images of the outside world produced by a fixed forward-looking infra-red pod), and a head-down multi-function display. The system has the following confirmed advantages.

- The resolution and dynamic range of the head-up display seen through Cats Eyes is not impaired since it is viewed directly through the combiners as opposed to the image intensifiers.
- Monitoring of all cockpit instruments is much easier using see-through combiners.
- Pilot awareness of the outside world is improved because of the direct vision and ability to scan with eyes on either side of the combiners.
- The pilot's sense of orientation is improved from the combination of direct vision and better peripheral vision.
- Dusk to dark transitions are less problematic because the image-intensifier display becomes more noticeable as the direct, outside-world view becomes fainter.
- The shorter length of the Cats Eyes system permits the pilot a greater degree of head mobility than possible with conventional NVGs.
- Cats Eyes NVGs are compact, lightweight, rugged and have a single-handed quick release for the helmet interface.

compressor blades. At 13ft 6 inches in length and weighing nearly 1700lb, the Jumo was not the easiest thing to work on. At the end of its stay at Rochester it was several pounds of accumulated dirt

lighter and much cleaner than the day it arrived. Now all the Preservation Group need is a Messerschmitt 262 or Arado 234 fuselage and a bit of time and who knows...

Alan Briggs



George, Alan, and Simon with the engine in the hangar.

JUMO 004B JET ENGINE

One of the more unusual items to leave the Rochester site in 1989 was this 1944 vintage Junkers Motoren (Jumo) 004B jet engine. The engine was refurbished for the Science Museum by members of the Preservation Group of the Medway Branch of the RAEs.

Pictured with the engine shortly before its return to London are some of the team who carried out the preservation work, Simon Brunt, George Elsegood and Alan Briggs.

While stripping and cleaning the engine the team were often surprised by the attention to detail in the original

engineering of the Jumo. Buried in the nose cone was a two cylinder two-stroke engine with a pull start ring for starting the engine in the field. A supply of two-stroke fuel was built into tanks in the nose cowling, some of which were still in place when the tank was removed. This fact was discovered in the time honoured way, when it started to drip onto our feet!

The overall condition of the Jumo was excellent and once the starter engine was removed the engine turned over with ease. This led to a notice being fixed to the top warning visitors how easy it would be to lose a finger on the sharp edges of the



Photo courtesy of McDonnell Douglas

www.rochesteravionicsarchives.co.uk

CHRISTMAS PARTY TIME!

Happy faces once more for the festivities at the Children's Parties and Pantomime.

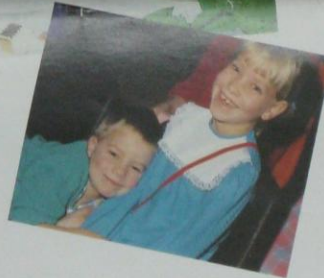
And thanks once more to all the Canteen staff, Management and numerous helpers who gave the Christmas season such a fine start.



Uncle Jim Collins and a budding pop star

"THE GOLD GOOSE"

WRITTEN AND PRODUCED BY



- | | |
|------------------|-----------------|
| LONG JOHN SILVER | ROD COLE |
| PRINCESS | JACQUI COLE |
| KING BERTRO | } NIGEL TURNER |
| BLACK JACK | |
| DR. HARRY | TIM EDWARDS |
| MR. HANDS | DAVE HUDSON |
| KING OF OVERLAND | } RAY NEWMAN |
| BEN GUNN | |
| CAPTAIN SCARLET | MAUREEN STEVENS |
| JIM HAWKINS | JENNY SMITH |
| OLD WOMAN | } EILEEN WADE |
| GOOSE | |
| SOLDIERS | JOANNE CROSS |
| | KERRY HOBBS |
| | KIM WADE |

At The Piano
BERT ROBBINS

Front Men

JIM COLLINS and PETER BIRD

Lights and Effects

PAUL BARRATT, MARK SNOWDEN,

CYRIL MOFFETT

and

Father Christmas

JIM GOUDIE

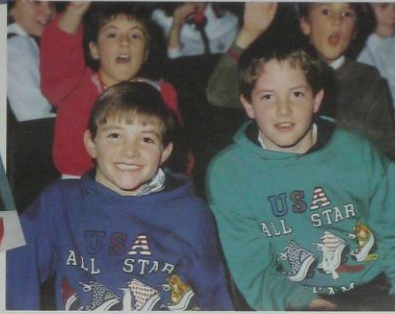


*Back row (l-r): Black Jack, Ben Gunn, Princess, Jim H
Captain Scarlet, Dr. Harry, Mr. Hands. Front row: Goose
Soldier Joanne*

www.rochesteravionicsarchives.co.uk



Di and Patrick (still smiling) were adopted by Sarah Moore



ENSE" SE"

JIM COLLINS



The Princess has just discovered she is going to marry ----- LJS!



Goose, Dr. Harry and Long John - but where's his Parrot?



OK - I'm still here



ukins, LJS peering through, Soldier Kim, Soldier Kerry,



Two Kings and their Soldiers



M.D. under threat of a dreadful fate from the pirate band



Photography - Alan Keats and Ian Douglas

www.rochesteravionicsarchives.co.uk

GAV 1989 Calendar

Most of us have admired the beautiful birds (No! Not that kind, Herbert!) on the GEC Avionics Calendar for 1989. Now, many others will have this same opportunity, as the Calendar has been nominated for entry to the Kodak International Colour Calendar Competition and Exhibition in Stuttgart.

A similar exhibition has already taken place in London, for the National Business Calendar Awards.

The calendar is the latest in a long line of calendars, designed by ASE-R Division's Graphics Dept and much prized by customers throughout the world to whom most of them are sent.

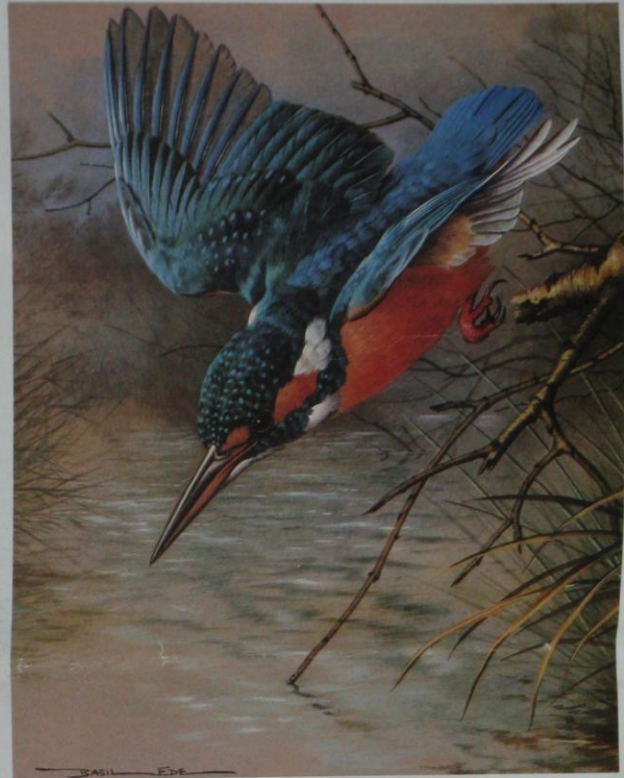
Previous collectable themes have included watercolours of Kent Scenes, the Tall Ships Race and aircraft drawings by the Guild of Aviation Artists. Ideas for themes for 1991 and beyond would be welcomed by Laurie Hampson.

The 1989 Calendar's bird pictures were chosen from the works of Basil Ede, widely regarded as one of the foremost painters of birds in the world today. His inspiration began with his exposure to Oriental art when he was regularly visiting the Far Eastern countries as a ship's purser.

His method of using a toned paper as an integral part of the background to his subjects has been widely adopted by bird artists throughout the world.

Over the last 20 years and more, Basil Ede's work has been exhibited in the company of other distinguished painters, in Europe and the United States.

Illustrated here is *The Kingfisher*, as a foretaste of summer to come. Occasionally still seen in Kent, its beautiful plumage is seen at its best when you catch a glimpse of it diving into a stream or pond for food.



Home Thoughts from Abroad



This charming picture, from Atlanta, shows Alison Cooper in her new home, with Claire (born Chatham December '85) and Alexander (born Atlanta June '88).

Alison will be remembered by many as Alison Richardson, who joined IND as a Trainee Programmer in March 1979, then married Grabam in May 1981, and left in September 1985 (by then a Software Group Leader in GSD) to have Claire.

Why Atlanta? Grabam left GSD in March last year to take up the post of Manager of Operations and Financial Planning at GEC Avionics Inc., - the next day! He had been

Contracts Manager in GSD since June 1986, having risen to that position since joining in February 1979 as Commercial Assistant (he met Alison on the graduate induction course). On the way up Grabam was successively Contracts Officer, Senior Contracts Officer and Deputy Contracts Manager.

The family have been in their new home since September, after spending a brief period in a hotel and six months in an apartment. Grabam says the transition was much helped by the friendly natives.

Any more stories from emigrants to the USA or elsewhere?

www.rochesteravionicsarchives.co.uk

"INDIAN SEA KING" HELICOPTER PROGRAMME — MASD AND ATED

In January the Indian Navy formally accepted delivery of their first three Westland Sea King Mk 42B helicopters; the contract is to supply 20 helicopters. The Indian Sea King is fitted with an integrated Tactical Mission System (TMS), designed and developed by MASD, incorporating the AQS 920 Acoustic Processor and ASN 902 Tactical Processor. During the programme MASD has been responsible for the integration and management function for the entire tactical mission avionics package. Processing is carried out in two 1 ATR Line Replaceable Units (LRUs), the Tactical Processing Unit and the Acoustic Processing Unit. These units house 17 microprocessors, each with an associated EPROM or PROM program store. Over 1,000,000 words are stored in the program. A unique Reversion facility means that if either unit fails the other can take over its primary functions ensuring a very high availability and mission effectiveness.

The first production TMS was delivered to Westland

Helicopters in December 1987 despite many changes to the original requirement. Ten major hardware and software sub-contractors were involved in the development of the TMS; at its peak 250 software engineers were employed on the program. During extensive flight trials further changes to the requirement were requested and accommodated. All remaining production systems and spare units were delivered to Westland at Yeovil during 1988; spare modules are still being delivered by Production.

The TMS provides the processing, control and display facilities for eight major systems, and with its common control and display units demonstrates the advantages of total system integration. The total avionics system comprises only 16 LRUs thus reducing the overall weight normally associated with multiple sensors in ASW aircraft. It has also simplified aircrew and ground crew training and reduced problems allied to logistic support.

Throughout the programme MASD, including its satellite team at Yeovil, demonstrated its ability to design, develop, produce and manage an extensive and complex airborne avionic system and above all to react quickly and effectively to changing customer requirements.



The Indian Navy Sea King Mk 42B.



The ISK Tactical Mission System.

The smiling faces reflect the successful hand-over to representatives of the Indian Navy of the first RF ATE with Automatic Test Equipment Division's Electronic Support Measures test facility incorporated. ATE Division's Program Manager, Dave Bennett (6th from right), was there as the ceremony was performed in the Yeovil factory by Mr. John Vardi, Managing Director, Westland Helicopters Ltd.



THE AIRCREW ASSOCIATION

The Aircrew Association, with over 12,000 members, is open to serving and retired members of HM Armed Services who have been awarded a recognised flying badge.

ACA aims include the fostering of fellowship and comradeship through meetings, events and gatherings and the forging of Allied and Commonwealth links.

Membership is £5.00 a year and there are several local branches.

Navy, Army and Air Force aircrew are all welcome. If you wish to know more, call Laurie Hampson on Ex 3346.

Educational Visits — Schools Meet the Company

On 18 November teachers from more than 20 Kent Schools, together with Brenda Trench of the KCC and other representatives of the County and Area Education Offices, spent the morning at GEC Avionics at our Rochester site.

After a brief presentation on the Company and the training schemes it offers, the visitors were divided into

small parties and given tours each in a different division, where hosts outlined the work going on, and provided an opportunity for the visitors to chat to ex-trainees. Further discussions took place during lunch in the Lounge Bar.

The visit was the first stage of a recruitment campaign intended to attract Upper Sixth Formers to the post A-

level training schemes in software engineering, hardware engineering and commerce. This campaign is being organised by Mary Golder-Hayes and Marguerite Blackwell of MASD on behalf of the Training Department, and is part of a new programme aimed at improving liaison with schools in Kent and ensuring that schools and pupils are aware

of the career opportunities available at GEC Avionics. Engineers, drawn from all the Divisions at Rochester and Chatham, together with Training Officers, are now visiting approximately 30 Secondary Schools in the area to talk to the second year sixth and encourage them to apply to GEC Avionics.

www.rochesteravionicsarchives.co.uk

NatWest

At your service

Once you have opened a bank account with NatWest, you have access to a wide range of services which can make life easier and simpler.

A current account is essentially a working account by means of which daily finances are conducted. Cash and/or cheques, postal and money orders can be paid direct into the account, whilst payments can be made from the account by cheque, standing order or direct debit. Many customers now draw their cash at any time, day or night, throughout our growing network of Servicetills – all current account customers are encouraged to apply for a NatWest Servicecard, which is the key to this 24 hour service. Personal customers maintaining a credit balance, no matter how small, will not pay charges at NatWest on their current account.

The Bank offers a number of avenues for savings and investment. For those of us with larger sums, £500 and upwards, and for those making regular savings, special interest rates, monthly interest rates and other benefits are available. All banks provide statements of account at regular intervals, and these provide a valuable aid to budgeting. You can of course obtain the up-to-date

position on your account by simply contacting your branch.

A bank account also gives the customer access to a comprehensive range of financial services at competitive rates. Many people like to save some of their money, perhaps with a holiday in mind, and funds can easily be transferred to a deposit account where useful interest can be earned.

Have you noticed how bills often seem to arrive all together? NatWest offers a Budget Account service which enables bills to be met promptly when they arrive and the payment spread evenly over a 12 month cycle. Many customers find this an enormous help in coping with the household expenses. Personal Loan schemes at competitive rates of interest are available from all banks to finance major purchases like cars and furniture. Before committing yourself to financial schemes for any such purchase, you should check the true rate of interest and compare it with what else is available. A Personal Loan can be agreed for any customer over the age of 18.

With the development of computer technology has come the automatic cash dispenser. At NatWest, this has taken the form of the

Servicetill which allows customers to obtain cash 24 hours a day, seven days a week, and, during normal business hours, use the machines to check their balances or order cheque books and statements. With their Servicetill card, customers are able to use a network of over 1,500 NatWest Servicetills and, under reciprocal arrangements with the Midland Bank, withdraw cash at any of the Midland's 1100 Autobanks. NatWest also have some 750 Rapid Cash Tills situated in its branches, which enable the Servicetill card to be used to withdraw up to £100 in just 15 seconds.

Banks are continually improving and broadening their range of services and a bank account can help you make better use of your money. So why not call in at your local NatWest and ask about opening an account.

As well as using the facilities available at the Airport Works sub-branch near the Towers (Monday-Friday 12 noon – 2pm) you may take advantage of Saturday opening hours 9.30am – 12.30pm at NatWest, High Street, Chatham and NatWest Kentish Bank Office, High Street, Maidstone.

SCHOOL LEAVERS IN 1989

TRAINING OPPORTUNITIES WITH GEC AVIONICS

Do you know school or college leavers taking G.C.S.E.s or 'A' Levels this summer?

GEC Avionics is now recruiting for all of its training schemes, which entail further education combined with structured training experience and supervision; schemes which are recognised as the launching pad for careers in most functions of the business.

Professional Engineering

Training beyond 'A' Levels which links academic study with a progression of relevant on-job training in divisional Engineering departments and offers a training salary whilst on site and a bursary to supplement the student grant.

Electronic & Production Engineering

Sponsorship is on a range of degree courses on a sandwich basis and includes working on engineering projects in preparation for a role as Development Engineer or Production Engineer. Training also includes an introduction to basic engineering principles and experience of the work of other departments to provide an appreciation of engineering in its business context.

Candidates will require good 'A' Levels in Mathematics and Physics and may already hold university offers.

Software Engineering

Sponsorship on the Company's three year Sandwich HND course in Software Engineering at Mid-Kent College or Bromley College. The middle year is spent providing a real contribution to the work of a divisional software team. The on-job training and college courses are truly integrated with a variety of short courses and projects.

Candidates should hold good G.C.S.E. or 'O' Level passes in Mathematics and three other subjects, with at least one at 'A' Level.

Commercial Training

Equally vital to the success of our business is the formation of professional Commercial staff to specialise in the Contracts, Cost and Budget,

Purchasing and Accounts functions.

The Commercial training scheme offers placements in these functions over two years, coupled with an HNC in Business Studies, on a day release basis. Applicants should achieve four good G.C.S.E. or 'O' Levels including English and Mathematics plus one 'A' Level.

Technical Training

For those leaving school with G.C.S.E.s in Mathematics, English and Physics or allied subjects, we offer training over three years to open up a career in Electronic or Mechanical Engineering at technician or skilled level. The scheme combines practical training in technical departments with practice and instruction at our modern Training Centre. This training is supplemented with day release to study for B TEC or City and Guilds Awards in Electrical or Mechanical Engineering. Opportunities beyond training are wide and careers will commence with skilled and technical positions in production, production service or engineering departments.

Clerical Training Our Clerical training scheme is a well established route to many opportunities such as secretarial, administrative, accounts and library clerk positions. Candidates are likely to be studying English and Mathematics to G.C.S.E. level and will be keen to make the transition to the business environment. On- and off-job training is coupled with study towards appropriate clerical qualifications and lasts for two years.

How YOU can help

If you have children or friends who may be eligible for any of these training schemes, ensure they are made aware of the opportunities with GEC Avionics. Around 10 per cent of the Rochester establishment are Initial Trainees being trained to secure the continued success of our business through the development of technical and commercial expertise.

To apply they can write or telephone for more information and an application form, or you might wish to collect it for them, from:

Richard Hale,
Senior Training Officer,
Training Department,
at our Airport Works address.
(0634) 44400 Ex. 3835.



National Westminster Bank PLC &



**25
years'
service**

Bob Marshall, before joining GEC, spent periods as an Engineer and Instructor with Rediffon Flight Simulators, and Radio Corporation of America. His first post in GEC was with Elliott Bros., where he was involved with radar and air traffic control systems; he became Technical Manager, Systems Group. Then, with Marconi Radar Systems he was Systems Manager, and since joining Rochester has been successively Principal Systems Engineer and Project Manager. On the Boeing YC-14 project he spent a year in Seattle as resident software and hardware support engineer. Next, Bob was Project Manager on the Jaguar FBW contract, the world's first full-time fly-by-wire fighter aircraft which led to the EFA design. More recent tasks have included flight controls research projects, an international missile feasibility study, and work on the 7J7 flight control system, and studies leading to evaluations on a development system, for an Advanced Tactical Fighter in conjunction with three other Rochester divisions. Bob is interested in classical music and is a 'ham' radio enthusiast.



Bob Marshall, Project Manager in CACD, with his wife Imelda.

Frank Eastwick's career has been concerned with the mechanical engineering aspects of the work of TACD, FCD (Mk 1) and CACD, where he is now Consultant Design Engineer. Early work was on the design of the Elliott/Bendix Flight Control Systems for VC-10, and BAC 1-11 for which he undertook the original design of the auto-throttle actuator. Later he was on the C-5A project team designing the Crosswind Landing computer and other equipment for the aircraft, one of our earliest major American projects. By 1971 his first division TACD had merged with MACD to form FCD, and Frank was working on Tornado units as well as Boeing 747 Autotrottle.



Frank receives his gold watch from Simon Frost. (A)

When FCD divided again in 1979, Frank was promoted to Chief Designer of CACD, and worked on Jaguar (FBW), EAP, and AM-X systems, becoming responsible for the EAP Control Stick design. He became Consultant Design Engineer in 1985, involved in several projects, particularly our current range of Stick designs. Before he was married, Frank took up gliding – not always on an even keel – but more recently Yachting, Classical Music and DIY have come to the fore.



Ray Irons completed his 25 year service in November of last year. For the last three years he has been Project Engineer in the Reliability group of ISD but prior to that had been with the same division, now CACD, for 19 years. He has worked on a wide range of projects such as Blue Steel, TSR2, C-5A, Tornado etc. normally in a development and commissioning capacity, and is currently involved in SCADC and its derivatives.

In his spare time Ray is a member of the Medway Magical Society and relaxes by walking in the countryside.



Paul Cooper, Marketing Executive in PCSD at Nailsea, as well as completing his 25 years with the company is also one of the longer serving members of PCSD, having 'moved west' in Jan '80 as one of the founder members of the Nailsea facility.

Paul joined the company, then Elliott Automation, at Borehamwood in early 1963 and within two years moved with the Division (PTE) to Rochester where PTE became ATED. During the heavy days of ILAAS and early A-7 HUD days he transferred to ADD where he undertook a number of roles including Chief of Test.

With the coming of MRCA he moved with his family to become ADD's 'Man in Hamburg' where he stayed for nearly three years. Within two years of his return from Germany he moved back to ATED to become Chief Engineer, a position he held until moving to Nailsea.

Paul's interest in photography made the choice of a camera an easy one.

Paul Cooper receiving his award from Howard Jones, Divisional Manager.



Chief Accountant **Brian Handley's** 25 years in captivity, he says, started work within what is now GEC as Assistant Accountant with Baldwin Instruments. In 1966 he moved to Borehamwood to become Deputy Accountant and was promoted to Chief Accountant in 1970. After 12 years at Borehamwood, Brian came to Rochester ten years ago.

Here he receives a presentation clock from Finance Director Tim Venables, left. (A)



Mick Hammond, Model Shop Foreman in ADD, has only been there since October last year. Before that he was Foreman in IND/GSD; fourteen years in that division were preceded by service mainly in Airborne Computing Division (later MASD). Mick had first joined ACD when they were at Borehamwood; when ACD moved here to Rochester he was appointed Charge Hand, on the Nimrod Mark I project. He has also contributed over the years to Jaguar, A-6, and Sting Ray, with one highlight being a visit to the USA as member of a working party preparing for training GAV people on the MLRS contract.

Mick's wife Brenda works in ADD Production. He received his presentation camera from his new DM Keith Snelling. (B)



Roger Sawtell, ATED's Chief Engineer, Advanced Development, has progressed from his first job in the division when he joined as Development Engineer; by 1969 he was Chief Development Engineer. Much of Roger's work has been on the F-111 and A-7 ATE projects. Many other activities keep him busy – not only golf and his parish council work, but also he is membership secretary for the RAEs Medway Branch and he co-ordinates the company flying scheme for ATED pilots. At home he is becoming a collector of paintings. (A)



John Taylor, after serving his Student Apprenticeship at RAE Farnborough – one of their first – and then some time at British Aerospace Weybridge as an aerodynamicist, joined Transport Aircraft Controls Division in 1963, to design the Automatic Throttle Control System for the BAC 1-11. By 1969 he was Project Manager with responsibility for the BAC 1-11 and VC-10 Automatic Landing Systems, a role he has retained to this day. Subsequently John has worked on Tornado and Sea Harrier Autopilot Systems (before CACD was separately formed), also the A310 Slat and Flap Control System, and lately the Advanced Ground Station for unmanned aircraft such as Jindivik. He was promoted to Engineering Manager a couple of years ago.

FCD's Divisional Manager Ray Dennis made the presentation. (A)



GAV/BP KENT CLUB SWIMMING SECTION Christmas Gala, 7th January '89

The Annual Christmas gala, Tea Party with Father Christmas, and Disco was run by the Swimming Section for all children of parents who are members of the Club. The Gala is sponsored by the Management Committee.

As the Club pool was closed because of a pump breakdown the older children held their gala at the Arethusia Pool in Upnor. The younger children's gala was cancelled and they had a film show in the Ballroom. The

feature film was Walt Disney's cartoon of 'Robin Hood', which was enjoyed by all.

Food for the tea party was provided by the children's parents – thank you to all who provided food and assisted with feeding the 70 children who attended.

Father Christmas gave each child a selection pack and a swim hat. The Disco was enjoyed by the children – and a lot of the adults!

My thanks to all who helped during the afternoon and evening.

A special thank you to Maurice Finch, Club Secretary, and the Management Committee for their assistance and financial support.

Results and photos should be in the next edition of GAV News.

C. MOFFETT
CHAIRMAN
SWIMMING SECTION
(Now on Ex. 3855)

GAV/BP KENT CLUB

The following information is given in the hope that members will retain it for future reference.

CLUBHOUSE

Opens daily at 10 am

POOL

Monday 4 pm - 8 pm
 Wednesday 4 pm - 8 pm
 Friday 11 am - 1 pm
 Saturday 4 pm - 8 pm
 Sunday

LOUNGE BAR

Monday-Saturday 11 am - 2 pm
 6 pm - 11 pm
 Sunday 12 am - 2 pm
 7 pm - 11 pm

Snack food available most evenings.

ALEXANDERS RESTAURANT

Tuesday-Saturday incl. 7 pm - 11 pm
 Sunday lunch 12 noon - 2 pm
 (Regret no supper licence - normal bar hours apply)

Bookings:

Monday to Friday 9 am - 5 pm
 Medway 251492 (Short Code 6009)
 Diners should wear jackets and ties to form part of male attire.

Jeans, sweat shirts, shorts, etc., will not be admitted

SQUASH

Available 10 am - 11 pm daily, except when Squash Section playing League Matches (advertised).

Bookings to be made in person, game to be completed before second booking is made.

VISITORS

A full member (Company employee) may sign in three guests to the Club/Restaurant, only one to the pool.
 A 50p door levy is required in respect of each guest.

JUNIOR MEMBERS

Full member's dependents, 16 - 18 years of age, may only attend the clubhouse if -

- Appropriate subscription is paid. This is 15p per week from date of becoming 16 years, i.e. £7.80 per annum.
- Attending an organised function, i.e. social, Parlour Derby Evening, swimming or participating in a section event.

(c) Accompanied by either member parent.

Junior Members may sign in one guest to any of the above on payment of the 50p door levy.

SNOOKER

It is regretted that this facility is not available to persons under 16 years of age. Members are requested to help the Management Committee maintain this rule in order to ensure that, so far as is practical, the table is kept in a satisfactory condition.

Last year we published as a supplement to GAV News a "Guide to the GAV/BP Club Sections". Plenty of reprint copies are available - apply to the Editor, Ex 3852.

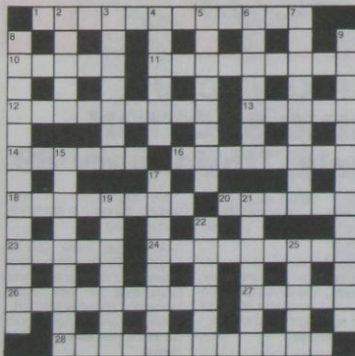
Management Committee

At the Annual General Meeting on 9th February, the existing Management Committee was re-elected unopposed.

Chairman	John Bradley	Director of Personnel, GAV
Vice-Chairman	Peter Bird	MASD Production Dept.
Members:	Rod Cole	MASD Quality Assurance
	Jim Collins	Social Secretary, office in Snack Bar Tel. Ex 3217
	Keith Jones	clo WES
	Hugh McArthur	Training Dept. (Hopewell Drive)
	Cyril Moffett	ISD Production Dept.
	Ray Newman	ASARD
	Tereñce Oxenham	BP
	Jim Troy	CACD
	Roy Wade	Fisher

Appointed Members:

Treasurer	Mark Perry	GAV Accounts
Assistant Treasurer	Valerie Squires	GAV Accounts
Secretary	Maurice Finch	Clubhouse Tel. Medway 251492 Shortcode: 6009



Crossword No. 95 For amusement only

ACROSS

- 1 and 16. Sailors for 366 days in a beautiful 28 (3,3,3,5-3)
10. Before and after cracking gives away a bad egg (5)
11. A British illness, rush to form one, so nothing gets done (9)
12. He grinds down with a big thumb (9)
13. Put a fire in it (5)
14. A cosmopsis is a horn of... (6)
16. See 1 across.
18. Declared to be a state of security (2-6)
20. A promise put on a shell (6)
23. A cowboy's loop (5)
24. He got away, on the loose (9)
26. A famous world-wide traveller (5-4)

17. Use the "Big Stick" (verbally) or physically (8)
19. Beethoven's operatic gift (7)
21. Hair apparent for forest Royal Family (4-3)
22. A beach, coastline, to be washed up on (6)
25. Fanshaped river mouth (5)

DOWN

2. For a petty offence (3-2)
3. Indulge much too wisely (7)
4. All consuming fruit pod (6)
5. More than a great many (8)
6. Indicators of greater years (7)
7. Taken out of this world, charmed (9)
8. Officer's promotion may present them (5-8)
9. A famed leader of Russia (5-3-5)
15. A secret listener does it (9)

Solution to Crossword No. 94

- ACROSS**
1. Christmas Island; 8. Best case; 9. Hobody; 11. Mads; 12. Fly-fly; 13. Creek; 15. Oklahoma; 19. Crimped; 20. Heath; 23. Stagnation; 25. Fan; 27. Duster; 28. Badinage; 29. Fly off the handle.
- DOWN**
1. Chrome; 2. Raspberry; 3. Back; 4. Margot; 5. Snowflake; 6. Aired; 7. Day by day; 10. Fairy; 21. Orange; 22. Breach; 24. Assay; 26. Dink.

Photographs taken by the Staff Photographers are acknowledged in the following way: (A) Alan Keats; (B) Ian Douglas.

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

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Clubhouse attractions

APRIL	Saturday 29th	MAY
Wednesday 26th DARTS 8.00pm	Swimming Gala 1.00 - 3.30pm PARLOUR DERBY 8.00pm	Saturday 6th BP SPRING DANCE with "SPIRAL"
Thursday 27th BALLROOM DANCING 8.00 - 10.00pm	Sunday 30th BINGO 7.15pm	Saturday 13th Soccer Dinner/Dance with "Ada's 60s Revue"

Bowls Section

With the start of the outdoor Bowls season only a month away, the section are urgently requiring new members, both experienced and learners, young and "mature". Bowls is no longer an "old man's" game as witnessed on Television.

There are excellent playing facilities at the Hoo club house, the green being one of the best in the district.

Tuition is available from an official County appointed coach. Amongst the fixtures are four coach outings to other clubs in London and Kent.

A NOTE FOR YOUR DIARY SPORTS DAY '89

SUNDAY 30th JULY
 AT
 GAV/BP CLUB, HOO

INTER-DIVISIONAL COMPETITION FIELD AND TRACK EVENTS

A DAY FOR THE FAMILY.

NEW THIS YEAR - CHILDREN'S FUN PARK, INTER-DIVISIONAL SWIMMING, 5-A-SIDE FOOTBALL, NETBALL, CHILDRENS RACES (EGG & SPOON, etc.)

VOLUNTEERS TO HELP RUN THE EVENTS ARE SOUGHT. CONTACT JIM COLLINS EX 3217.

There is a Ladies section so the "other half" can join you in the game. You will be assured of a warm welcome.

For further details phone
 R. Austen Ex. 4254
 C. Goodman Ex. 3308
 M. Crucifix Ex. 4181.

REAPER CLUB

A very successful year for the club drew to an end with the closing of the year. The December meeting was in the form of the Annual Dinner and Party, an event enjoyed by all present. Once again we welcomed as guests of honour Mr. and Mrs. Ron Howard, who replied to the toast of "The

Company". After dinner, during which gifts were presented to every member present, all enjoyed the Dancing, Cabaret, Raffle and Bingo. For the second time the Scottish took over the Cabaret, and an air of Caledonia invaded the canteen, as our friends Dr. Duncan and Dr. Norman got going. They enjoyed themselves as much as we being entertained. A great Dinner (thanks to Bill Gostling and Staff) and a great 'nite'.

that our Chairman and his wife (during his stage name of 'KEN') had recently appeared as guests on Cilia Black's "Surprise, Surprise!" programme. They had been spotted by many members. As unofficial Medway Pearly King and Queen, they met 26 other London Borough Pearlys, and their work for Charity over the years was highlighted in the programme. By the end of our meeting they had both come back to earth, with their feet firmly planted on the ground.

January saw us kick off 1989 with the Annual General Meeting. Everything went to plan, until the re-election of officers. The Treasurer had expressed his desire to retire. The news was greeted with dismay, but the reasons for it were understood - ill health. After a while the President received a valid nomination and the election proceeded.

CHESS PROBLEM SOLUTION

ETERNAL TRIANGLE
 Key 1 Qa8! Waiting
 1 - a5 any 2 Sc2 mate
 1 - Rxa3 2 Qb8 mate
 1 - Rb2 2 Bxb2 mate
 1 - Rc2 2 Sxc2 mate
 1 - d5 random 2 Rxa2 mate
 1 - Sxb1 2 Rxb1 mate

So cunning is the effect of 1 Qa8! that even after Black has played his a-Knight, some would not see the mate 2 Sc2 - mate because the Rook is pinned! Another well hidden mate is after 1 Rxa3 when, with the Black Rook safely tucked behind the White Rook at b3, White can play 2 Qb8.

The Queen's corner to corner to corner triangular path is unforgettable!

Officers elected for 1989 are:
 Chairman - C.R. Boorman.
 Vice-Chairman - C. Rhodes.
 Secretary - C.S. Skinner.
 Treasurer - Mrs. Stevens.

During the evening there was an air of mystery and surprise. It finally transpired