

GSD's 'DOUBLE' – THE ARMY & THE RAF

Guidance Systems Division has won two important contracts, not only of value for their sales, but also for the breakthrough into markets which hold enormous potential in the future.

The Army will be receiving their first Ring Laser Gyro navigation system, for artillery use, and the RAF have selected the computerised map system to be fitted to their latest Harrier GR.7.

Divisional Manager Bob Ruggles says "Once again GSD initiative, teamwork and dedication combined with considerable company investment has resulted in major new contracts. Both of these contracts are firsts in two totally different areas of technology and as such they are expected to pave the way towards much future business in supplying these systems to other customers."

Digital Map for Harrier

An airborne computer which can reproduce colour maps in the cockpit has been selected for the RAF's latest Harrier, the GR.7. The solid state Digital Colour Map Unit (DCMU) can store an area the size of Europe in one avionics box.

The order, placed by the Ministry of Defence (PE) on Guidance Systems Division, is the world's first such solid state mapping system and has been won against strong international competition. The new navigational aid supersedes the previous generation of electromechanical, film-based map displays – the Jaguar generation – and has been developed over several years using experience gained in flight testing in the UK and the US.

The contract for the DCMU, which requires it to be produced to very tight timescales and satisfy the requirements of the GR.7 development and production programme, is worth over £7 million. The system also has considerable export potential and GEC Avionics is already demonstrating the DCMU worldwide, aimed at a number of other advanced navigational requirements.

The system can store all the information presented on a conventional paper map and reproduce it faithfully on an electronic colour display in the cockpit. In the Harrier, this will be a multifunction display, the map information being one of several modes available to the pilot. The colour map complements our night vision system, already chosen for this aircraft.

The DCMU, which has no moving parts, is all housed in one avionics box. The unit can store map data representing



Although in black and white, many features of the DCMU can be clearly seen in this off-screen picture. On top of the terrain map are overlaid symbols programmed for the mission in hand; the white line is the planned track of the aircraft, with turning points; symbols representing the latest intelligence information on hostile tank and troop positions, radars, fuel dumps and aircraft can be seen. The broad dotted line is the Forward Edge of Battle Area, and the dark patches are threat zones, reduced by masking by hills.

an area the size of Europe as well as being able to store different scale maps. Such a high density of information has been made possible by data compression techniques developed by the company, which are unique to this equipment.

The unit derives its data from conventional paper maps which are digitised from separate feature planes. These can be modified to delete unnecessary information and can also be colour modified to suit ambient lighting conditions, compatibility with night vision goggles being a major consideration.

The map displayed to the pilot moves in relation to aircraft position in either 'track up' or 'north up' orientation. The pilot, at the touch of a button, can zoom the map to show either more detail or a larger area. He also has the ability to 'look ahead' as well as being able to select different scales of map. The unit will also carry mission overlay information in full colour, with which the pilot can see planned tracks, turning points, known targets and intelligence information, such as the positions of friendly and hostile forces.



Beverley Waddell is holding the paper map which is digitised and stored on a card similar to and smaller than the one held by Paul Carey.

Ring Laser Gyro for Warrior

GSD has been selected to supply a new ring laser gyroscope navigation system, which will help pinpoint targets accurately for the Royal Artillery. The Azimuth Position and Elevation System (APES) will be supplied to GKN Defence, Wolverhampton, for integration in the Army's

WARRIOR Observation Post Vehicle.

With production options, the order will be worth over £17m and is the first to be placed for a British Army equipment based on ring laser gyros.

GEC Avionics has established an exclusive licensing agreement with Honeywell Inc.



A Christmas Message from Ron Howard

I am glad to take advantage of the Christmas Issue of GAv News to thank everyone in the company for his or her efforts throughout the past year and to set the scene for 1988.

As most of you will already know, our market position is very sound with good orders won in the United Kingdom and overseas and a higher proportion of forecast exports than ever before. Together with our associated companies in the United States, GEC Avionics Inc and Lear Avionics, we have the industrial strength and product capability to tackle new and interesting projects in the future.

It is only, however, through being competitive in the face of changing international market conditions that we can retain our lead, and I know this spirit will serve us well as we go into 1988.

I would like to wish everyone a very Happy Christmas and a successful New Year.

TWO NEW DIRECTORSHIPS

Last month's item on the Management Team did not make it clear that the two appointments noted as 'Reporting to Managing Director' are at Company Director level.

John Clover is Production Director and
Jerry Fisher is Marketing Director.

Congratulations to both.

to incorporate the United States company's mature ring laser technology into a range of products, including this British Army system.

As APES will have none of the moving parts used in conventional gyroscopes, it can ensure reliable information despite the harsh shock and vibration conditions encountered by tracked vehicles.

APES is based on the Honeywell H726 Dynamic Reference Unit and in conjunction with a GEC Avionics Control and Display Unit, and a laser rangefinder, processes input signals to give the necessary vehicle position to enable targets to be located accurately.

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

No Apology for Droning on

Llanbedr is a small town situated in a very popular holiday area on the North Wales coast, some ten miles from Harlech. Just outside Llanbedr, the Royal Aircraft Establishment (RAE) has an airfield on the coast which has two main functions. One is to act as a diversionary airfield for RAE aircraft operating out of Valley on Anglesey and the other is to provide a remotely piloted aerial target service to the Cardigan Bay range run by RAE Aberporth. At present, Jindivik, with which many of us are familiar and for which FCD manufacture the flight control system, is the main target aircraft flown at the range and has been in service for the past twenty five years. In 1983 FCD produced a study document that reviewed RPV control and total RPV systems and after much consultation with RAE, a contract was placed with GEC Avionics to develop two prototype Advanced Ground Station systems (AGS) with improved safety characteristics over the existing system. The GEC Avionics

supplied systems have a safety target of better than 10⁻⁷/hr probability of causing a hazardous situation.

The new AGS had to be compatible with the existing ground transmitters and receivers, and interface with a newly developed PCM data link.

Reconfigurable electronic cockpit type displays were utilised, with the ability to provide a real time video overlay on computer generated graphics to provide an interface with the operator which minimised workload and hence reduced the chance of error.

The system is capable of being reconfigured easily and quickly following failure and can control a number of different aircraft types.

Currently Flight Controls Division have delivered two systems, which are up and running whilst a third is being assembled.

Flights of the Sea Vixen aircraft, which, in its dromed version uses an FCD autopilot, have been successfully demonstrated.

HOLIDAY TIME AGAIN!

The Pickfords Travel Shop opens again on Tuesday 12 January, and every Tuesday until further notice.

This year it will be in the Personnel Department Conference Room (inside, and to the right from Personnel Department entrance), 12.00 to 2.00.

Bookings can be made while you wait.

Remember their offer...

Pickfords Travel

Great Holiday Savings

when you book with Pickfords Travel

ORIGINAL TOTAL BOOKING VALUE	SAVE
£200 - £399	£15
£400 - £599	£25
£600 - £799	£35
£800 - £999	£45
£1000 - £1199	£55
£1200 - £1799	£75
£1800 - £2499	£150
£2500 or more	£200

EXAMPLES

INCLUSIVE HOLIDAY **FLIGHT ONLY**

MAFORCA 14 Nights 7 Adults @ £1200 ORIGINAL PRICE £2036 SAVE £150	COSTA DEL SOL 14 Nights 7 Adults ORIGINAL PRICE £358 SAVE £15
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The pick of the travel people

AS&RD raise money for cancer research

AS&R Division gave very generously to sponsor Carole Witt's daughter, Debbie, in a run at her school, Christchurch Girls. Carole works in Stock Control Section of the Supplies Department.

The money raised, £280 in total is being donated to cancer research at St. Barts Hospital, London, where Carole's son Stephen has been a patient.

Just as we went to press, this message was received—
It is now with deep sadness that AS&RD Supplies Department announce that Stephen died from cancer on Friday 27 November, aged 17 years. As reported, his sister and classmates at Christchurch Girls School did a sponsored walk to raise money for the London hospital that Stephen attended.

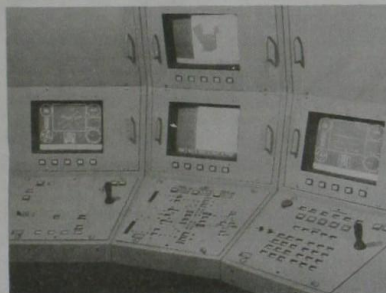
Christians Everywhere

The article in the October GAV News by John Aplin of FCD was read with interest by a group of people in ADD.

John said he was constantly surprised at the number of Christians he came across who work at GEC. A few of us in ADD started meeting regularly on Thursday lunch times a while ago and have been pleased to see the numbers grow steadily both from within and outside the

division. More recently the FCD members have started their own regular meetings.

We are very keen to make contact with other Christians within the Company and encourage other groups to form for regular fellowship. Anyone who is interested is invited to contact either George Graham or Derrick Wood in ADD or Tom Hamill or John Aplin in FCD.



Console for the Advanced Ground Station.

GEC Avionics fishing team win trophy

On Sunday 22 November, three lads braved the cold weather to win the

'Grain Working-Mens Beach Trophy' for the second year running. Alan Fosbeary (CMS), Bob Lucas (CMS) and a friend Paul Cole entered a team in the name of GEC Avionics.

The competition took place on Grain beach by the Medway Estuary. The match was won after four hours by the largest combined weight of fish from all three team members which was 4lb of Flounders — this echoed the generally bad catches all round.

Bob Lucas (CMS) also won the individual prize for the heaviest bag of the day — a Microwave and £40 cash.

Fish and chips all round?

COMMENDATION FOR THE CANTEEN

Recently at the Civic Centre, the Deputy Mayor of Rochester-upon-Medway, Cllr. Ben Reeves, presented a number of local companies and businesses with Certificates for the **Clean Food Premises Award, 1987**. Canteen Manager Bill Gostling was proud to

receive the Certificate of Commendation, as recognition of the standard of hygiene maintained during the year. This covers all aspects of the operation of kitchens, serving areas and tables, tea points, and the associated activities, and is thus a boost for everyone

involved in the operation of the canteen.

A feature to highlight the background, and the behind-the-scenes story of the canteen's daily work and the many extras over the Christmas period, is planned for the next issue.

FELLOWSHIP IN MANUFACTURING MANAGEMENT

COMPANY SPONSORED

The Engineering Industry Training Board runs a highly successful management course designed to produce Senior Manufacturing Managers of the future.

The course consists of a three month foundation phase at Cranfield Institute of Technology, Bedfordshire, followed by a twelve month in-company phase, during which a major assignment is carried out under the supervision of company and Cranfield tutors.

The company would welcome applications for sponsorship on the Fellowship intake commencing 29th February 1988.

Applicants should be:

Age: Approximately 30-35 years.
 Education: Degree or near equivalent in an engineering or science discipline.

For further information and/or to apply please contact Mr. A.R. Williams, Principal Personnel Officer. Ext. 4326.

Replies are required not later than 15th January 1988.

GEC AVIONICS RECEIVES 'AERO' CERTIFICATE FOR WORK WITH SCHOOLS

On 13 November, AERO's Manufacturers' Certificate of Service for significant contributions to air education was presented to Managing Director Ron Howard. The presentation by Mr. John Viner was on behalf of AERO, the Air Education and Recreation Organisation, the nation's official air education body.

Mr. Viner, who serves as Press Officer for AERO, is headmaster of St. Peter's and St. Margaret's Junior School, Rochester. The national Organisation presents Certificates each year in the following categories: Museums, Operators, and the aerospace industry. The National Committee unanimously selected GEC Avionics Limited as a result of its schools liaison work during Industry Year.

In addition to the company's ongoing schools liaison work, some examples of Industry Year activities were the training given on company premises to 70 local teachers in computing and electronics, with six-week evening classes, and consultancy arrangements through which science and maths teachers were able to learn about industry by undertaking tasks in divisions' engineering departments. Pupils from



L-r: David Perry, John Viner, and Ron Howard.

a local primary school undertook seek-and-find projects, visiting one of the company's divisions and preparing a report on their findings about the practical exercises they were given in the company's work.

Advisors were also provided for Young Enterprise groups in schools, and the normal programme of visits by schools and attendance at careers conventions was maintained. In addition the company is sponsoring 125 engineering students at universities or polytechnics.

This is the second occasion on which the company has been cited in connection with schools liaison during Industry Year, the former being in the Royal Society of Arts Awards which were earlier presented at Airport Works. David Perry, Manager, Training Services, also attended the Certificate award ceremony. Each year, GEC Avionics provides training places, on average, for six young people per Medway secondary school.

During Mr. Viner's visit to Airport Works he was shown

the restoration work on two WW2 Hurricane fighters, being carried out with the company's encouragement by the Aircraft Preservation Group of the Medway Branch of the Royal Aeronautical Society, in a workshop behind the Airport hangars.

The Group's Project Leader Lewis Deal and two senior officers from RAF Biggin Hill, to which one of the Hurricanes will be returned for display, also attended the ceremony, together with Medway Branch Vice-President, Malcolm Moulton.

THE SNEAK THIEF

Today's society includes a very wide cross section of characters; it includes the wit, the bore and the practical joker to name but a few.

If you take a look at your working colleagues, you will be able to spot the various personalities.

Unfortunately, amongst many work forces there is a character who is not easily spotted. He or she is the sneak thief. This is a despicable character who steals from his or her workmates. In older times this was considered a most heinous crime almost equivalent to murder. Even today, to steal the tools of a colleague is treated very seriously by Magistrates.

This particular type of theft not only deprives a working associate of his or her property, but it causes considerable discontent amongst the staff, a lowering of morale, suspicion, arguments. The effect soon snowballs.

Statistics show that petty theft is not generally a result of hardship, but is due to avarice. Greed is the enemy of today. We would all like something more than we can afford. The vast majority of us accept that we will either have to go without or save to get that extra item. There is, however, a small element of today's society who will exploit the weakness or carelessness of his or her workmates to get that little bit extra.

It is incumbent upon the rest of us to try to put a stop to the activities of this very small minority. To turn a blind eye to theft is to condone it. Each one of us has a moral and lawful duty to prevent crime.

You will know whether or not there is a thief in your locality. You can do your bit

to reduce the problems as follows:

1. Reduce the risk.
 - (a) Don't take unnecessary personal items to work.
 - (b) Keep the amount of cash that you carry to a minimum.
 - (c) Separate your cheque book and cheque card.
 - (d) Don't advertise.
2. Remove the target.
 - (a) Don't leave personal or other attractive items laying around.
 - (b) Put everything away when you leave the immediate area, even if you 'won't be long'.
 - (c) Lock everything away if you will be gone for any length of time, at lunchtime and at night. A short time spent at this time could reduce heartache.
3. Be vigilant. Be aware of strangers or casual visitors. If necessary, challenge them by asking if you can assist them. Let them know that you are alert. If you are not satisfied with their explanation, advise your supervisor of the situation.
4. Report all incidents of theft. You will probably not be the only one that has suffered. Patterns of thefts emerge that can point towards the offender. If you think you know who the thief is, it is your duty to pass on this information. You will not be sneaking but looking after the welfare of your colleagues and yourself.

No one likes a sneak thief and you can be sure that your colleagues and Management will give you every support in eradicating any problems that may arise.

R.W. ELVY
Sergeant,
Crime Prevention Officer,
Rochester Police Station.

GEORGE'S 20-YEAR BEARD IS REMOVED IN AID OF CHILDREN'S HOSPITAL

George Graham, Production Controller in ADD, has lost the beard he first grew over 20 years ago. The idea came when he was seeking a way of raising money for a children's charity — his colleagues offered to sponsor his shave on condition that he spent a whole working day with half a beard.

On Thursday 26 November the barber arrived with wicked razors and soap. Angela Brehony, a Tester in ADD, had promised that if sponsorship exceeded a certain figure, she would perform the task of half-shaving George. And in the presence of many colleagues, Angela and George between them deftly removed the right side of George's cherished full set. The following morning the barbering was completed.

The result of this ordeal was the collection of over £620 sponsorship money. This has been donated to the Wishing Well Appeal for the redevelopment of Great Ormond Street Children's Hospital.

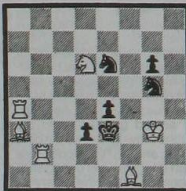
A cheque was presented to Ken Castle of ATED — Ken is on the Board of Governors at the Hospital — and later in the day Ken took the cheque to London to hand it over to the Chairman of the Appeal, The Rt. Hon. Lord Prior PC, who is also Chairman of GEC.

Why did George do this? "I have a great feeling for hospitals after I had a long illness some years ago" he said. His wife, Sandra, a nurse, has said she is 'happy' with his decision, but was spending a week in Manchester away from the family home in Walderslade.



CHESS PROBLEM

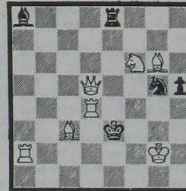
Problem No. 14
White to play and mate in two moves



Solution to Problem No. 13

The Queen goes free
Key 1 Rh4! (threat 2 Bd4 mate)
1... Bxh5 + 2 Bxh5 mate
1... Se4 2 Qd4 mate
1... Sf3 2 Qd3 mate
1... Re4 2 Qd2 mate
1... Se6 2 Re4 mate

In a game, a pinned White Queen rarely goes free, and it is usually the end of White: in a problem, a pinned White Queen frequently goes free, and it is always the end of Black! Black finds off the threatened 2 Bd4 mate, but upsets the White Queen three times by interference. The accurate forcing of the three Queen mates is engineered with elegance.



IS IT TIME

YOU THOUGHT ABOUT A HOME EXTENSION?



IF SO, IT'S TIME TO TALK TO BARCLAYS ABOUT A BARCLAY LOAN

Have you the money you need for those major purchases? Apply for a Barclayloan (they start from as little as £300), draw it before 31st March 1988, and we will pay for a dinner for two at the

Grest Hotel, Rochester.* Ask Rosalee Lee, your Personal Banker, for full details. Remember! You don't even have to be a Barclays customer to take advantage of Barclayloan services.

*The dinner for two can be taken any night of the week at Grest Hotel, Rochester at the Grest Hotel, Rochester before 31st March 1988. Subject to availability. Applications will be considered on terms, repayments, and other details available from Barclayloan, New Year and Bank Holidays.

+++ YOU'RE BETTER OFF TALKING TO BARCLAYS

For some time the author has been prevaricating about completing the requirements for the Royal Yachting Association's Ocean Yachtmaster Certificate. The theory part was completed some years ago, but the practical part remained a problem. The major part of this involved completing a passage in a yacht between two points, the navigable distance between which had to be at least 600 nautical miles.

For the average yachtsman, this requirement posed a number of significant problems. 600 miles represents about five days sailing in broad terms, implying that the two way trip would severely dent the average fortnight cruise. Fortunately, this very real problem was recognised by the RYA who amended the requirement such that the passage could be started and finished in the same place, sailing a circular route. At the same time a number of potential loopholes in the passage were closed up. The most significant of these changes was the introduction of the requirement for at least 200 consecutive miles of the passage (of 48 hours) to be more than 50 miles from land. Examination of an Atlas reveals that the distance from Ushant to the Scillies is 100 nautical miles. For anyone starting this passage at one of the Channel Ports (as I was) the choice of route was fairly constrained – one sailed to the mid point between the Scillies and Ushant, then continued onwards for an appropriate distance, and then came back.

And so it came about; the nucleus of a crew was recruited, a suitable boat was chartered and the long prologue to a cruise was commenced. The biggest problem was getting a crew, or at least getting a full one. I needed 10 altogether, and for a long time had only six or so (the numbers fluctuated as people found that they couldn't get their leave at the right time, etc.). One very keen member had to drop out for family reasons – he discovered that he was due to become a father again the day before the cruise was to start, and felt that this had a higher priority than a sailing trip.

Following the insertion of an advertisement in this journal, the last two places were filled and we were complete. The yacht selected was 'Rival Star', a Rival 41 class sloop which I had chartered several times previously and considered suitable for this type of passage. A pre-cruise meeting was held to enable everyone to be introduced, and establish food likes and dislikes so that the catering could go ahead.

The great day dawned wet and the author, chartered from Maidstone to Poole amid torrential rain, wondered how fast the boat would sink if the hatches weren't rain resistant. Arriving from all points of the compass, Rival Star's crew gathered on Poole Quay with a pile of kit and stores that produced looks of disbelief on the faces of passers-by. It did all fit into the boat – just! When we were ready to leave we advised the three boats outward of us of this fact, and created utter confusion when we cast off. I expect they got sorted out eventually.

We motored to Studland Bay, a pleasant anchorage just outside Poole Harbour, where we dropped the hook for the night, and got ourselves sorted out.

Blue Water and Dolphins



Alongside Poole Quay.

At back: Alistair King, Adrian MacLeod (GSD), Peter Morgan, and 'Frankie' Clarke.

Sitting: Alistair MacLayden (GSD), Linda Mose (ADD), Keith Williams (ISD), Simon Williams (Keith's son), Diane Hinge (ex-Gyro) and Rod Solomons.

(Peter Morgan's father Geoff used to be in FCD/Gyro/ADD).



Peter on another tack with Linda.



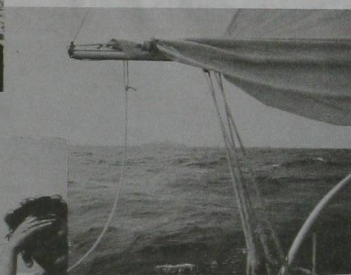
And at Sea – Frankie, Rod, Linda at the helm, and Adrian.



Frankie and Diane relaxing at anchor in Lulworth Cove.



Alistair taking sights, with Alistair and Diane.



QE2 Ahoy!

After a good meal and a discussion on the proposed activities of the cruise, the watch roster was pinned up for all to see. There were three watches as follows:

RED

Mate: Alistair King
Adrian MacLeod
Simon Williams

WHITE

Mate: Rod Solomons
Linda Mose
Frankie Clarke

BLUE

Mate: Diane Hinge
Keith Williams
Peter Morgan

The selected watch pattern was for 48 hours of watch-keeping (4 hrs on and 4 hrs off, with dog watches), followed by a day of domestic duties, consisting of cooking, cleaning and sleeping.

After turning in, it started to rain... and rain... it rained all night and blew hard as well. Veering another couple of fathoms of chain at 0300, the author found it difficult to stand upright at times. By the time we were ready to be off next morning the rain had stopped, the wind had abated and there was a considerable swell left over from the previous night.

An awkward sail towards Portland then followed. As we got the feel of the boat, sail change followed sail change until the maximum amount was deployed. (The sea had calmed by then and the breeze settled down as well.) The last few hours were in bright sunshine and cheered everyone up no end. We anchored at the north end of Portland Harbour overnight, ready for the off.

Monday morning at 0600 was cold, wet, gloomy and with a stiff northerly breeze. After breakfast we weighed anchor and set off towards Portland Bill, in company with a number of other yachts also bound for the west, but not as far as us. Once round Portland Bill we set course for the mouth of the Channel.

The VHF radio was monitoring channel 16, and we were surprised, later that morning, to hear a ship calling the QE2. Sure enough, not too far away was the familiar outline previously discounted by the watch as being of no danger to us. QE2 was in a hurry and the other ship was in the way!

The sky cleared during the morning, and noon sights were taken for latitude. The weather seemed (and was) set fair for us. One of the objects of the

cruise was to navigate entirely by Astro navigation when out of sight of land. This was achieved, due to the fine weather, except that no evening star sights were taken due to cloud at this time each day. However, morning star sights were achieved each day except the last, and three sun-sights per day as well, apart from the first and last days.

Normally, we could have expected to have to beat out of the channel, due to the prevailing wind. Fortunately, the wind was from the North all the time, giving us an easy sail. As it was, we settled gradually into the routine of living on board a boat at sea, and the high spots were such things as sail changes to accommodate the varying wind strength, and playing guessing games with fishing boats in the middle of the night.

For the author, also the navigator, the primary activity was keeping track of our position. The time of Meridian Passage (local noon) had to be calculated each day, to prepare for noon sights, which established our latitude, and the observation itself actually performed. Morning and afternoon sun sights for longitude were taken at suitable and convenient times. However, the calculations for these sights were more involved. Each afternoon I prepared for star sights at dusk and the following dawn. This involved estimating the ship's position at the times of local dusk/dawn, then calculating the approximate altitude and bearing of the selected bodies, ready for taking the sight itself.

As it was cloudy each evening, half the work was of no avail, but doing it was good practice! Morning star sights involved rising before local dawn ready to make the observations as the horizon became distinct enough. (Observations with a marine sextant involve superimposing the image of the observed body on the horizon, and it is the clarity of the latter that causes the problems. These sights worked out surprisingly well for a first attempt.)

The evening of the second day brought our first view of dolphins as they gambolled around the yacht. It was, unfortunately, too dark for photos, but a memorable sight nonetheless. The third day was anticipated to mark the turn round point. Calculations of the distance run so far, and to the desired destination showed that a turn round in the late afternoon would be involved. So at precisely 1700 BST to the echoes of the Greenwich time signal and the accompaniment of the 'PM' signature tune, Rival Star was put about for the course back. A sun sight confirmed the position (N49° 13.3' W11° 09') and served as a compass check as well. The dolphins reappeared that evening and gave a splendid show. The sea had actually looked blue that day, being on the edge of the continental shelf, and looking over the stern at a couple of dolphins keeping station we realised how clear the water was.

The next morning's Astro fix showed that we were well to the south of where I had predicted (south of Latitude 49°N in fact), so the course was altered to make more northing. Late that evening the working jib was set and sheeted in, followed by much flapping. A call to me was that the 'sail was broken'. Ominous forebodings of a broken halyard were dispelled, but the broken head lashing took a bit of fixing, as we had to pull the sail out along its luff wire again. Not an easy task as the sail was about 10ft longer than the boat. We managed it by guile and cunning and secured the head with a sail tie. All was well again – so we thought.

At 0300 the cry went up 'Broken Rigging!' Rapid lowering of the sails then followed. The starboard fore lower shroud had parted all but four of its 19 strands of stainless steel. Ajury rig was set up, but I wasn't too happy about how well it would hold if pressed, and a proper repair was urgently required. The nearest port with the required facilities was Falmouth which lay some 60 miles to the North East. By motor sailing, we could reduce the strain

ADD'S QUEEN'S AWARDS..

At Basildon on Friday 9 October, the Queen's Award for Technology was presented jointly to Airborne Display Division and Electro-Optical Surveillance Division (now of GEC Sensors Ltd), in association with the Royal Aircraft Establishment, Farnborough. And at Rochester on Friday 16 October, the Queen's Award for Export was presented to Airborne Display Division.



AIRBORNE
DISPLAY DIVISION

These distinctions, although held by Divisions, are in fact awarded to the company as a whole. The involvement of common services and of other divisions makes the gaining of

Queen's Awards a matter of pride for us all throughout the company.

At Rochester, on the morning of the presentation we all arrived at the factory to witness the damage caused by the previous night's hurricane and wondered whether the ceremony would be able to take place, but fortunately all was well and proceeded according to plan, albeit a little late.

The award presentation was made by Robin Leigh-Pemberton, the Lord Lieutenant of Kent, to 'Mac' McNulty, Production Test, and Martin Redfern,

Engineering, representing the Division in front of an invited audience of local dignitaries, company management, and divisional colleagues.

The ceremony was video recorded and then shown to a separate buffet lunch in the Towers Conference Rooms for all the local sub-contractors, who play an important part of the Division's success and were invited to join in the Division's celebrations.

..AND OPEN DAY

The following day ADD opened its doors to members' families and friends to enable them to see demonstrations of its facilities and products. It proved to be a very successful day with a steady stream of people from ten o'clock in the morning until four o'clock in the afternoon, visiting all areas of the Division which is widely spread over the Rochester site.

Starting in the Towers which house most of the Engineering team, the Design Section amply demonstrated its ability in utilising modern techniques of computer aided design facilities. I am sure many visitors were very impressed with the Applicon graphic displays used in the basic

design of most of the Divisional products. The Drawing Office showed the progression in detail of the drawings and artwork required for the manufacture of multi-layer printed circuit boards or flexi circuits which are extensively used within the Division's products, again using modern computer techniques.

The newly developed digital moving map demonstrated how new technology in digital head down displays is progressing, and the support group showed how technology has changed over the years in a progression of test equipment development.

The Model Shop, which is

where the Engineering development models are made, very clearly showed their skills and technical ability in all aspects of machining, fitting and electronic wiring and assembly.

Moving into the main factory, the Production Department put on a great show of the Division's products covering every aspect of manufacture and calibration from small part assemblies to a working line of head up displays. One

of these showed a moving raster picture of the outside world simulating the aircraft's forward looking infra red television camera. This amply demonstrated the facility of the day and night capability of this equipment made for the F-16 fighter aircraft.

Head down displays, which are supplied for the 'Tornado' aircraft, were also on display and showed how they were used in supplying information to the co-pilot with reference to flight plans,

terrain following and target positions.

An area that caused quite a stir was in 'Corsair' where the helmet sights were being demonstrated. 'Cats Eyes' are their code name and cats eyes they are, as in what appeared to be a pitch black room visitors were able quite clearly to see in the dark, a remarkable instrument and well demonstrated.

Downstairs in 'Corsair', the Quality Assurance Department were showing their eye opener in the form of

the monster from outer space as viewed under the electron beam microscope, in fact it was a crane fly they had magnified 1000 times, very impressive, as were the rest of their defect investigation exhibits.

To sum up, a successful two days for a successful Division, and if the award is won again in two years I am sure Keith Snelling's men will have a show that is as new, and as interesting as this one, well done ADD.

Ken Trafford



(l-r) Martin Redfern, Principal Systems Engineer; Donald 'Mac' McNulty, Assistant Chief of Test; Robin Leigh-Pemberton, Her Majesty's Lord Lieutenant for the County of Kent; Sir Michael Beetham, Chairman of GEC Avionics.



Managing Director Ron Howard, with the Lord Lieutenant; Chairman of GAV; The Mayor of Rochester-upon-Medway, Cllr. Mrs. Mary Fennemore; Peter Hearne, Assistant Managing Director, GEC-Marconi Ltd.



Basildon's presentations were by Her Majesty's Lord Lieutenant for the County of Essex, Admiral Sir Andrew Lewis, KCB, received by (left) Steve Pickering, Project Manager Night Bird 1010, EO/S, and (right) Alan McEndoo, Project Manager, ADD. The background is the exhibition area prepared for the ceremony visitors.



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ISD 'SCADC 1000'

FRIDAY-THE PRESENTATION

The formal handover has been recorded elsewhere, but here is a picture of some of ISD's principal guests with Ron Howard after the ceremony.



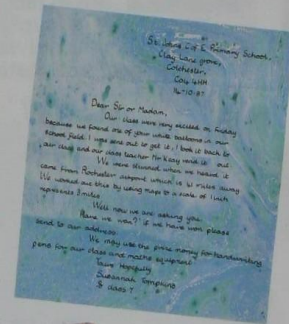
Ron Howard with (left to right) Col. Shulstad, USAF; Cllr. Mrs. Mary Fennemore, Mayor of Rochester; John Lapp, USAF, SCADC Programme Manager.

THE GREAT BALLOON RACE

To celebrate the delivery of "SCADC 1000", 1000 balloons were released from the Towers Car Park at lunch time, by people from Production Dept. The day was blustery but a high proportion of the UFOs escaped the perimeter fence and headed north, albeit sometimes in clumps rather than individually.

71 reply cards were in due course sent in, mainly from the Colchester/pswich/Great Yarmouth area, but the winner of the £25 first prize was at Waddington, Lincs., 136 miles from Rochester. The 'sponsor' of the winning balloon was SMS Development Engineer Glenn Saphin, who got a prize of £50.

In addition to the first prize, consolation prizes were sent to a young lady of Great Yarmouth who returned 12 tickets, to a gentleman from the Military Corrective Training Centre at Colchester, who landed 14, and a class of school-children from Colchester whose letter is shown here.



Start of the Great Balloon Race.



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TURDAY- OPEN DAY

ISD's Open Day on 10 October, despite atrocious weather, attracted – appropriately – about 1000 visitors, mainly guests of ISD employees but also including parties from local schools and a number of subcontractors.

The theme for the day was "ISD at Work" and efforts were concentrated on showing the normal working environment rather than a series of special displays. All parts of the division were represented, including the recently formed

Microsystems Group, and Offshore Projects Group from Nailsea.

One special feature which attracted much interest was an edited version of the previous day's SCADC presentation in the Conference Centre. This was displayed on a 'video wall' of 16 TV monitors, with the ability to show one large image or up to 16 smaller pictures at the same time. This display was produced and shown by Don Short, Manager of the Audio-Visual Unit at New Road.

The Organising Committee (Fred Mackley, John France, Bob Gee, Keith Greenfield, Ian Brimelow, Bill McCutcheon, Ernie Smith and Ian Negus) would like to express their thanks to all those who supported the event, especially those from

outside the division who assisted before and during the day – notably Canteen, Company Photographers (some of whose work is on this page), AV Unit, Security, Surgery, Training, Transport, and Works Engineering.



Divisional Manager, Fred Mackley shows his guests round ISD.



Pat Masarra shows Steven Terry (9) how to assemble a PCB, with father Dave Terry of Test Dept. and brother Danny (3).



I gotta balloon! Louise Fudge (4) just got it from Mandy Faint and Yvonne Broady who were handing out 'goodies' at reception. Brother Simon (8) had his eyes on a SCADC sticker.



John France, QA Manager, and his wife Ann and other family members in Stores Dept.



In Production, Linda Gorman and son Darren (5).



Now what on earth is that??



Kevin Challis, Project Leader SMS, discusses something with Norman Hicks (Logistics), with Jonathan Hicks (16) looking on.

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LONG SERVICE ASSOCIATION DINNER & DANCE

Another event to survive the hurricane was the LSA Dinner-Dance held on Saturday 17 October. About 630 members and guests filled most of the main canteen to enjoy the meal put on for them by the canteen staff, and the music and dancing afterwards. Guest of Honour was Managing Director Ron Howard, who took the opportunity of bringing the assembly right up to date on

the events and successes in the company over the past year – the rise and rise of GEC Avionics', he said.

"Especially, I wish to pay tribute to one particular long-serving individual whose career is outstanding, both as a company colleague and as an executive of the LSA. Referring of course to the President, Dave Harries who retires in January after 49 years with the company."

Having long been an active member, Dave served for 2 years as Vice-President until 1980, succeeding Vic Spencer on his retirement, as President.

Ron Howard, on behalf of the company and LSA members, extended to Dave and his wife Mary every good wish for the future, and asked him to accept a camera as a mark of friendship and esteem.



Ron Howard hands over Dave's camera.



Retiring President Dave Harries.



Flowers for Mrs. Howard.



Bob Ruggles, Heather and Mike Doran, and Jean Goulden.



John Goodhand, Chairman, addresses the guests.



Derek and Maureen Wood (left), and Brian and Jeanette Gotting.



Ken Castle with Doreen Bowyer and Rita Ainsley.



Bill Lotley (left), Rod Argent and their wives.

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on the jury shroud, but as there was still an appreciable amount of movement in the mast, I was thankful for moderate conditions.

We reached Falmouth on Friday evening, having passed the magic 600 mile figure whilst still some 30 miles out. The next morning, due to the good offices of David Carne Marine at Penryn, we effected the necessary repairs by lunch-time, much quicker than I had expected. As a matter of interest, I had performed a check on the rigging each day (as requested by the owners) and found no faults during the afternoon preceding the breakage. Stainless steel, for all its durability, is noted for brittleness, and fails at stress points (as ours had done), if there is excessive movement.

The afternoon was spent among the numerous tourists in the town, followed by a meal out in a local Restaurant. The ground had stopped swaying by then and it was a treat not to have to chase the plates round the table for a change!

The next morning, anticipating a mid-afternoon departure, a casual check of the passage plan for the trip to Guernsey, revealed an error of detail which involved us leaving immediately. This was not to be, however, as the mud banks separating the Marina from the river left insufficient water for us to get out. The approach channel was being dredged at the time by a retired JCB on a pontoon. The JCB driver was clearly on piecework, and in keeping clear of him we went firmly aground, just before low water. We got out after a couple of hours and set off with a light following breeze.

By the time we reached Guernsey the next morning, the wind had freshened to about force 7, and reaching up the Little Russell saw nine knots on the clock. We entered the Marina at Beaucette with a few inches under the keel. (Any later and we would have had to wait several hours for the next tide.) After lunch, hire cars were organised and a visit to St. Peter Port followed. Dinner in the Marina Restaurant ended the day.

The next day, Tuesday, we again set off for a tour of the island. Guernsey roads are narrow and have granite walls either side. We decided that land navigation was more difficult than sea navigation, particularly when you can't see over the walls! We moved the boat that evening, ready for an early start in the morning. About a dozen boats arrived shortly after, but the prospect of us moving at 0600 the next

day kept anyone from mooring outside us. (We were on the outside of two large motor cruisers anyway.)

0600 Wednesday saw us leaving the Marina, en route to Cherbourg. Thick fog and rain were the high spots of the passage, but we arrived safely after a seven hour trip. The formalities over, we set off to do the town and established the best buys for wine, etc. Yours truly got to play one of the organs in the Cathedral (not the "Grande Orgue" unfortunately), and Peter was instructed in the art of obtaining money from a French Bank. Our evening meal was washed down with two litres of bottled EEC wine lake (a five francs/litre - and quite palatable too!).

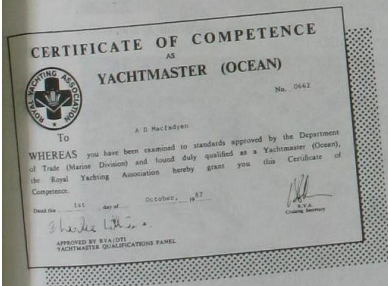
The next day was spent in obtaining duty-free (or cheap) goods ready for the return trip. As we cast off at 1700, we wondered how far below her marks Rival Star was, and hoped that the packing was adequate. Fortunately we had an uneventful trip across the Channel, arriving at Weymouth at 0700. An obliging customs officer cleared us without fuss, after which we sailed gently down the coast while hoisting Linda to the masthead to investigate the non-functioning tricolour lamp. Her report was that the light appeared to be on (it hadn't worked the previous night), and that the view was superb. She was allowed down again and we came to anchor in Lulworth Cove (a favourite spot) for a few hours. Some of the crew went ashore (so that Frankie could demonstrate his proficiency at rowing the rubber dinghy) while others slept, or read.

There followed a pleasant sail to Poole, ending in a brisk romp up the approach channel and a battle of wills with the Sandbanks ferry (the ferry won!). At 1600 we moored at Poole Quay and started to clear up. The food was judged to be a nicety - after the evening meal there was virtually nothing left! (Fortunately we had enough money left for breakfast the next day in a cafe.) The local real ale was sampled, "Tanglefoot" by name, and we assumed, by effect, Adrian had an unknown amount and swore the next morning that it ought to be renamed "Tangle-stomach".

And that was the end of the story. We logged 844 miles altogether and (hopefully) enjoyed the experience. We certainly formed a good crew, to whom I offer my congratulations and thanks for their tolerance of the Skipper. Also to Mrs. Pat Phillips for typing all this.

PS - I passed!

Alastair Macfadyen



25 years' service

Eileen Papworth, now Confidential Secretary in the Sports and Social Club office, was originally Statistics Clerk in Swift and Swallow, then rejoined Elliotts in Personnel Dept. for the same job, in 1962. By 1965 Eileen was promoted to Section Leader, Personnel Records. It was 1969 when she moved across to the Club office, where she has since been involved in helping and organising a host of Club activities such as - typically - the Christmas Childrens' parties and pantomime (for which she used to make costumes), the Christmas Dance, Sports Day, and many charity events. Eileen's husband Roy was a draughtsman in MASD until five years ago.

Director of Personnel John Bradley made the presentation of binoculars - and Eileen also received a large bouquet of flowers.



Ted Daw of ADD Model Shop emigrated from Canada when he was born at Southampton! The family set up their home here in Kent. When Ted started work it was as Tinsmith within the M&D Bus Company, and he joined the Royal Marines in 1942, seeing action in the Middle East. He worked for several local engineering firms before joining Elliotts' Gordon Valves Division, working on several different machines there and in Fuze, moving to ADD shortly before Fuze transferred away. Ted has had some bad luck with his health and now does all the Model Shop engraving, as well as sharing his life-long knowledge with younger colleagues. He was presented with his camera by the Divisional Manager.



Kelvin Morris joined the Company from English Electric Gyro Division as a Design Office section leader, transferred to MACD as a Design Engineer and was promoted to his present post of Chief Designer of FCD in 1980 on the separation of the Flight Controls Division to FCD and CACD.

Kelvin has been involved in varied programmes including Tornado, Rapier, Boeing 747 and the A310 and A320 Airbus.

His outside interests include photography and indoor and outdoor bowling.

Divisional Manager Ray Dennis was making his first 25-year presentation. (A)



John Giles, Production Project Controller in GSD, served apprenticeship with Elliotts for seven years instead of the more usual five, on account of his Sandwich course at Medway College. Then in 1969 he joined IND as the Jaguar NAVWASS project went into production, remaining there on all the major projects until the amalgamation with Gyro, when he was appointed Section Leader of the Production Engineering Systems team. John has recently visited the USA for training in connection with the MLRS project. And his interests include angling, boating, and photography.

John received his presentation canteen of cutlery from Divisional Manager Bob Ruggles. (B)



Robbie Smith was in the Royal Navy before he came to this company, and continued in his trade as Instrument Mechanic and Instrument Technician in AS&RD. In 1967 he transferred into Training as Apprentice Supervisor, in 1971-2 he went for a spell to the Control Valves side, and after a few months as Assistant Training Officer he moved to AS&RD Quality Assurance, finally reaching ADD, his present division, in 1975 - where he has been PAO and Project Controller. Robbie now works in the Holographics area.

Here he is seen with his wife Mary, after receiving a presentation camera from Robin Sleight. Perhaps he can now make a picture record of some of his caravan trips. (B)



Bill Hobbs has had a long career in the aircraft industry. He was for five years an Air/Ground Electrician in the RAF, with part of his service in Germany. He spent six years at Vickers Armstrong, Weybridge and two years at De Havillands, his work being aircraft wiring and circuit function testing.

Bill has spent his time at Rochester as a Prototype Wireman and Technical Assistant, in IND, MACD, FCD, Gyro and GSD. His work in recent years has been on the Sling Ray GSU both in its development and production phases. As the roving repair man he has spent many days off-site at Wembley, Portsmouth and Neston putting to rights the blow-ups of development units caused by the good intentions of the 'Marconi' men.

Bill is interested in DIY, Radio, TV, and Hi-Fi, and is a very keen gardener.



Continued overleaf

Les Williams, in IND/GSD since he joined, has over the years become the 'fount of knowledge' on gyros, particularly on the NCS1 system which has been a main task for Les since 1970. This project is now on continuing production and PDS, so his expertise is much in demand, even by the makers of that particular gyro, for whom his instant diagnosis of a fault is almost always confirmed! Les was presented with a camera by Bob Ruggles. (B)



Vern Rose, Wireperson, has been in IND/GSD since he trained in the Wiring School when he joined. Most of his time has been spent in the superclean area. For hobbies Vern has a great interest in playing football and darts.



Ken Trumper, Quality Technician on AS&RD night shift, received his clock from Production Manager Ken Rhodes. Ken Trumper started at Rochester as apprentice mechanical fitter, moved through MACD, AED and PSD, and joined AS&RD in 1976, going on permanent night shift a couple of years ago. 'Daytime' interests include watching sports, and gardening. Ken's wife Brenda runs a general store - Christmas discounts for AS&RD!



John Brumpton also received his presentation, a camera, from Ken Rhodes. John was also an apprentice fitter, finishing his training in MACD Hydraulic Lab where in 1967 he became TA. Later he was Tester and in 1971 he transferred to AS&RD Clean Room, where he became Leading Hand and in 1983 Quality Controller.

In John's case his DIY interest is suspected to be destroy-it-yourself, but evidence to the contrary is shown by his long-standing restoration of a custom-rust 1972 MG Midget.



Paul Jessup joined the Company and served his first six years in the Sheet Metal Shop, firstly in the general area, then moving to the Detail Section and finally joining the Inspection Team.

In 1968 he transferred to AS&RD as an Inspector on the Shop Floor until, in 1973, he suffered a total kidney failure. He spent two years of his life on a dialysis machine, very ably assisted by his wife Mary, then in 1975 he received probably the best news in his life - he had a kidney transplant.

Because of the medical situation, Paul joined the Inward Goods Section of AS&RD where he has been promoted via Leading Hand to Foreman, the position he now holds.

Paul chose a very attractive chiming clock for his gift, which was presented by Bill Letley, QA Manager. (B)



Martin Redfern,

Principal Systems Engineer in ADD, started his 25 years with Student Apprenticeship with Rank Cintel - during that time he obtained his engineering degree.

The Rank Cintel move to Rochester brought Martin here, and most of his work has been as design engineer on analogue circuits for all but the very first generation of HUDs. Recently this has led, through LANTIRN, F-16C/D and A-7 projects, into development of ADD's next generation of HUDs and his present role of Design Consultant to the Display Design Group. Martin says his design activity overflows into domestic life and expresses itself as novel though not necessarily cost effective items for his house, car, and bicycle. And some software development for his home computer. (B)



John Smith wanted to follow in the footsteps of his father, who worked in AS&RD, and was accepted as an electrical engineering apprentice. After gaining a double HNC, he went to TACD as junior engineer, and in 1971 he went to IND as Systems Engineer - instead of leaving!

For several years he worked on NCS1 and duly rose to become Chief Systems Engineer. John began to get involved with ADD and some joint studies, and in 1982 he transferred to take over systems responsibility for the LANTIRN programme. Later, in 1984, John became F-16 programme manager for the projects for our major customer General Dynamics; the latest developments for GD are well under way.

John received a camera for his presentation by the Divisional Manager.



Retirements

Joan Williams, Senior Cost Clerk in Accounts, says farewell as she retires after eight years in the department.



Bob Robinson (above) and **Eric Thresher** with Curly Childs. Bob finishes 20 years as Buyer, and Eric 10 years in Goods Inwards, in ADD.



Laurie Crowhurst, Fitter in ADD, finished his service with good wishes from Production Manager Curly Childs, who also...



...bade farewell to Viewer **Doris Marshall** at the end of nine years in ADD.



Continued overleaf

Doris Jacobs, Confidential Secretary, retires after working for ADD's QA Manager Alan Dane for over 22 years.



Frank Lloyd has been in CMS for 10 years, as Sheet Metal Worker. Harry Cruttenden gives the best wishes of colleagues and friends.



All Harrison came in to give his best wishes to **Eileen Green** on her retirement from CMS Paint Shop.



Sports and Social Club round up

GAv/BP Kent Club Swimming Section

ANNUAL GALA/SPLASH AND DISCO

The Swimming Section invites children of ALL Club Members to a Swimming Gala, Splash and Disco to be held at the GAv/BP CLUB POOL on Saturday 2 January 1988

A party tea will be provided and Father Christmas is expected to present a small gift to all Gala and Splash Entrants.

The Gala will start at 2.30 pm (Gala entrants report at 2 pm and Splash entrants report at 3 pm). The splash will start at 4 pm. The splash is for young or inexperienced swimmers who can swim two widths (very young with armbands if required) or one length.

The tea, Prizegiving and Disco will be held in The Club Ballroom. Tea from about 5.30 pm, Prizegiving from about 6 pm and Disco from 7 pm until 10pm.

AGE GROUPS

(Age at 2nd January 1988)

- SPLASH** — Boys and Girls of any age 2 widths or 1 length
- Group 1** — Boys and Girls under 10 1 length (25 yards)
- Group 2** — Boys and Girls 11 & 12 2 lengths (50 yards)
- Group 3** — Boys and Girls 13 & 14 2 lengths (50 yards)
- Group 4** — Boys and Girls 15 & 16 2 lengths (50 yards)

Annual Gala/Splash & Disco
entry form on the right

R.L.S.S. Aquagold Award sponsored by the Leeds Building Society

Sarah Moffett aged 11 was presented with her Aquagold Award at the club pool on Thursday 19 November. Sarah's award was presented by Tony Mills, manager of The Leeds' Strood branch.

The Aquagold award is a series of 15 tests covering personal survival and life saving, i.e. one of the tests is to swim 150 metres in less than four minutes fully dressed.

Sarah is the youngest member of the GAv/BP swimming section and is probably one of the youngest in the country to receive this prestigious R.L.S.S. award.

The skills taught at our personal survival/life saving group are a credit to our teachers — Mrs. D. Dutton, Mr. C. Newman and Mrs. C. Gibbey.



Sarah Moffett receiving her sports bag and certificate from Tony Mills. (B)

DISTANCE AWARDS

Children

Name	Age	Distance (Metres)	Name	Age	Distance (Metres)
Helen Goldsmith	8	50	Owain Cornfort	8	1,000
Dawn Goldsmith	11	400	Lucy Davies	7	1,000
Lisa Simpson	9	400	Carrie Davies	11	2,000
Steven Pethig	8	400	Michael Harvey	8	2,000
Anna Maxey	6	800	Mandy Atkinson	14	7,500
Clare Taylor	10	1,000	Sarah Moffett	11	7,500

Adults

Mick Goodrum 1,500

Army Cadet Force

Congratulations to **Richard Carpenter** age 16 on becoming National Army Cadet Force Champion Swimming 50 metres freestyle.

Details of GAv BP Comets S.C. overleaf.

Children's Annual Gala/Splash & Disco on Saturday 2nd January 1988

Please enter my child in the following events:

- Breaststroke Backstroke Freestyle
 Splash (two widths) Splash (one length)

Child's Surname

Christian Name

Date of Birth Club No.

Signed (Parent/Guardian)

Date

Address

Tel. No. (Home)

(Work)

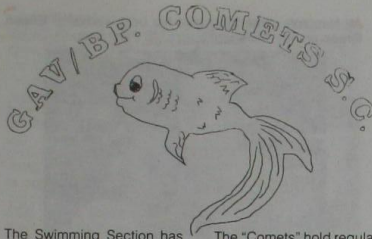
Please send entry forms to Dave Jibb ADD Engineering or Cyril Moffett, PSD Production.

Note to GAv/BP Club members not in Swimming Section

If there is insufficient time before the Christmas break, phone Cyril on Medway 48707 to let him know you are coming, and bring the entry form on the day.

Further Information Contact:

Dave Jibb, ADD, 3907
Cyril Moffett, PSD, 4241



The Swimming Section has an active competitive swimming group which meets at the Club Pool on Tuesday and Thursday evenings from 7.30 p.m. to 9.00 p.m. and on Sunday afternoons from 1.30 p.m. to 3.00 p.m.

For the younger or less experienced swimmer there is an improver lane. They are coached in front crawl, back crawl, breast stroke and butterfly. They are also taught starts, turns and finishes. All teaching/coaching is in accordance with A.S.A. rules.

The "Comets" hold regular club Galas throughout the year with many awards for them to aim for. This culminates at the annual Gala and prizegiving. This will be on Saturday 2 January 1988 commencing 2 p.m. at the Club pool. The "Comets" also organise inter-club galas. The most recent was held on 7 November where the Comets swam against Beachfields, Black Lion and Sevenoaks.

Some of our better swimmers swim in Medway Galas

usually held at the Black Lion Sports Centre. This year our swimmers have won one Gold and two Silver Medals.

Our swimmers also swim in galas at other pools - the most recent was held at Sheerness.

The "Comets" are looking for boys and girls from nine years to sixteen years of age. **FEES:** 50p per week per child (children are encouraged to attend all three training sessions therefore the fee is set at 50p per week whether they attend once, twice or three times a week).

If you have a child/children who may be interested why not:

- bring him/her along to meet us on a Tuesday or Thursday evening at the club pool - time 7.30 p.m.;
- enter him/her in the Annual Gala on 2 January 1988 (entry form in this edition of GAV News). For the younger (nine years of age and under) or the inexperienced swimmer there is the one length freestyle event);
- contact Dave Jibb on 3907 or Cyril Moffett on 4241.

Affiliated to M.A.S.A.; S.C.A.S.A.; R.L.S.S. Competitive Swimming

REAPER CLUB

Employees are still continuing to reach the age for retirement, and we are pleased to welcome them into membership of the Reaper Club. Here they can keep in contact with old friends and former work-mates. On joining the club, they are given a sincere welcome, and quickly fall into the scheme of things. November meeting saw a number of persons joining us for the first time.

we were entertained, once again, by the GEC Avionics Concert Brass Band, (our own Works Band.) They presented a delightful programme of music which was thoroughly enjoyed and appreciated. The introduction to each piece by their conductor Ted Clark gave an added zest and interest to the rendering.

Bingo, as usual, closed the evening, together with the raffle.

GAV/BP KENT CLUB ELECTION 1988

Nomination for Ordinary Member of the MANAGEMENT COMMITTEE

(three vacant seats for GAV employees)

Candidate's Name (please print)

Club No:

Date:

Proposer's Signature:

Club No:

Seconders Signature:

Club No:

This Nomination Paper is issued subject to Clause 5(a)(iv) of the Constitution and Rule 3

**Nomination Papers must reach the
Club Secretary by 31 December 1987**

**Remember - AGM Thursday,
18 February 1988**

Club-House attractions

Christmas Eve
Club Closed
2 - 6 pm
**XMAS EVE
DANCE**
with
"PEBBLE MILL"
7.45 - 11.45
(Bar till 11.30)

**Sunday 27th -
Wednesday 30th
December**
Club Open as usual

**CHRISTMAS DAY
and BOXING DAY**
(Saturday 26th)
Bar Open 12.00 - 2.00
All other facilities
closed

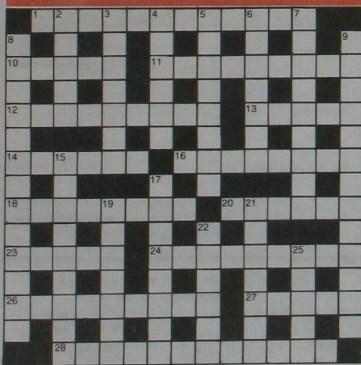
New Year's Eve
Bar Open 11.00 - 2.00
Club Closed 2.00 - 6.00
A+A DISCO
6.45 - 8.00

**NEW YEAR'S EVE
DANCE**
"SPIRAL"
8.00 - 1.00 am
(Bar till 1.00)

The Management Committee has agreed to make 100 tickets available for Guests at £2 each. Requests for tickets should be made, in writing, to the Secretary's Office. They may be collected at the Club on the day, but please phone to check allocation, Medway 251492.

**NEW YEAR'S
DAY**
Club Open
as usual

**Saturday
2nd January**
**Annual Gala/Splash
and Disco**
See details on
previous page



Crossword No. 88

For amusement only

ACROSS

- The gift of the second Wise Man. (12)
- Fisticuffs or wordy. (5)
- Did she sew, she had a needle. (9)
- Jogging or other movements. (9)
- The deep dark hole to avoid. (5)
- Nearly perhaps, not quite. (5)
- It is not for you, so do as you are told. (5-3)
- Stopped or held on suspicion. (8)

DOWN

- A cheat and vagabond. (5)
- A means of communication. To be read. (7)
- Perchance it may be needed, so pack it. (2-4)

- It may be a pawn or rook. (8)
- What a card sharper can always produce. (3-4)
- To become an entrant, fill it up. (5-4)
- May not be perfect, but completed in a way. (5-1-7)
- When in danger, you can do. (5-3-5)
- Not intent on law abiding. (9)
- A promotion above Corporal. (8)
- What a shopper is, large or small. (7)
- Somewhat with a crimson colour. (7)

Solution to Crossword No. 87

ACROSS

- Walking the plank; 8. Signpost; 9. Albion; 11. Left; 12. Family ties; 13. March; 15. Mata Hari; 19. Publican; 20. Psalm; 23. Rat catcher; 25. Stun; 27. Teeth; 28. Patience; 29. A drop in the ocean.

DOWN

- Wisely; 2. Leg of lamb; 3. Imps; 4. Gas bag; 5. Palm days; 6. Alibi; 7. Kingship; 10. Divan; 14. China shop; 16. All at once; 17. Operetta; 18. Catch; 21. Seraph; 22. Intern; 24. Their; 26. Vigo.

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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