

# MARCONI AVIONICS NEWS

House Journal of Marconi Avionics Limited



**MOTTO FOR THE MONTH**

The great bourn of all common sense: compromise.



## Youth Trainees Commence Year's Training

62 young people, who would otherwise have been unemployed, joined the Company's new Youth Training Scheme in September for one year's training designed to prepare them for work in the electronics industry.

The scheme is just one of many such initiatives which are being taken by organisations in Britain to help alleviate the effects of unemployment which fall with particular severity on the young - GEC for instance aims to provide 2000 such places and MAV 125 overall. It is funded by the Manpower Services Commission which provides a weekly allowance for trainees and a grant to help with training and education costs.

Organisations setting up the schemes - known as Managing Agents - are expected to design and propose programmes, provide or obtain staff and facilities, monitor and control quality and standards and in all respects be responsible to MSC for the effective and efficient management of the scheme.

The Rochester scheme aims to give these young people, some of whom have parents and close relatives in the Company, the best possible start to their adult lives and to improve their prospects of obtaining employment or a place on a permanent training scheme or further educational course. YTS trainees use exactly the same facilities as Company employee trainees, for example, they all attend the same 3-day residential induction course run by Training Department staff. This consists of an exhausting timetable designed to act as a bridge from school to work and to assist trainees quickly to become comfortable in their new surroundings. This is followed by a period at Hopewell Drive intended to build up basic skills which are relevant in any occupation - reading for comprehension, writing concisely, calculations, practical skills, working with others - and then to develop skills of specific relevance to the electronics industry.

The scheme has two streams - clerical services and technical. The clerical stream receives a total of 13 weeks off-the-job training and most of this will be provided by Med-Kent College which is offering a specially designed course including typing, office practice, computer literacy and word processing. Technical trainees spend 25 weeks at our training centre, learning about wiring, bench work and electrical theory, and are thus available for shorter periods of on-job training in the factory.



Maxine Turner with instructor Hugh McArthur, (A).

Following their off-the-job training, trainees will move into the factory - on average 2 or 3 per Division at any one time - to work alongside adults and receive 'work experience'. The aim here is that they experience real work rather than become skilled in it and to realise that their own abilities can be put to good use in a structured and disciplined working environment.

Every other week on average trainees attend a life and work skills course which will assist them to cope with the programme as it develops and to anticipate and prepare for some of the difficulties they may face on completion of the year's training.

The wide and varied experience of those people in the Divisions with whom these youth trainees will work is an asset which will help ensure the success of the scheme. The Company's hope is that, as a result of their year's training, these youngsters will develop positive attitudes and become self-reliant people more able to cope with the future, whatever it may hold for them, with greater confidence than might otherwise have been the case.

## 100th Slat and Flap Computer delivered

In the sixteen months since the first flight of the new A310 Airbus, Flight Controls Division has been busy manufacturing production slat and flap control computers to meet the recent launch into passenger service. The 100th unit was delivered in August representing a significant milestone in a successful programme for which total orders now exceed 350 units. Two computers each housing four microprocessors are used in a redundant configuration to achieve the high levels of safety needed. In order to meet the level of production required a Compact automatic test equipment produced by ATED has been used to reduce test times.

A derivative of the A310 computer is also used for slat and flap control on the latest Airbus the A300-600. This aircraft made its first flight from Toulouse on the 8th of July and work on the manufacture of Production Slat and Flap computers is under way. Meeting both the development and production timescales has required good team work involving all departments in the Division; the photograph shows just some of the people involved.



A310 Airbus



Some of the team involved with the manufacture of the computers for A310 and A300-600, including engineers, D.O., Q.A. and production staff.

## Quality Apprentice Award

Mr. Charles Berry who spent many years at Rochester as a U.S. Air Force Q.A. representative expressed a wish at the time of his retirement last year to inaugurate an annual award in the Q.A. field. He was particularly interested in encouraging apprentices who would be entering quality assurance.

As a result, Mr. Berry has presented a Trophy to be called the Charles Berry Trophy which will be presented annually to the Quality Apprentice of the Year. Selection, which would be based on all round ability and personality, would be carried out by a small committee nominated by Management.

A committee consisting of Mr. J. Roberts (Personnel), Mr. D. Short (Training), Mr. N. Evans (COD) and Mr. J. France (ISD) was formed in June 1983. Having studied college and other reports a short list was

produced as follows:-

D.R. Caney  
G.W. Ghost

Miss S.V. Cross  
P.R. Giles

The four were interviewed by the committee with Mr. Berry in attendance, on Thursday 1st September 1983. After careful consideration it was unanimously agreed that the Charles Berry trophy should be awarded to David Caney at present employed in ADD. The committee were most impressed by the very high standard of the four candidates and complimented them.

Arrangements are being made for the Trophy to be presented to the winner at the next Quality Assurance Managers' Meeting probably early in October.

## Achievement in "The Worlds Toughest Race"

Steve Upton, a Mechanical Inspector in ATED, came second in the Quadrathon which crossed Sussex and Kent and finished in Gravesend on Sunday 21st August. He was only beaten by Richard Crane who is famous with his brother for his 2000-mile run in the Himalayas earlier in the year. Paul Nihil of ATED was one of the main organisers and has given the following account.

Steve was very very unfortunate not to win; at Tunbridge Wells after the 2 mile swim and the 50km (31 miles) walk he was ten minutes down on the leader Edmund Shillabeer, a champion race walker. Due to a bulb going in his bicycle lamp he was delayed thirteen minutes thus he started the cycle 23 minutes behind, yet at the end of the cycle he was 25 minutes up on the field and it seemed no one would catch him. Unfortunately another stroke of bad luck, his ham string muscle went and he had to walk most of the 26.2 miles marathon route. In this section Crane overtook him and went on to victory.

Steve was sponsored by Ward & Partners (the local estate agents). His work mates at ATE held a collection and made a presentation to him.

For the record 87 started the race after a cannon was fired on the sea front by race patron Jimmy Savile, OBE. Eight failed the swim, two the walk, four the cycle and nine the marathon making a total of 64 finishers. Four women took part, two completed the course:-

**OVERALL RESULT**

- |                              |             |
|------------------------------|-------------|
| 1. Richard Crane (Cumbria)   | 16h 26m 49s |
| 2. Steve Upton (Kent)        | 16h 40m 17s |
| 3. Edmund Shillabeer (Devon) | 16h 53m 04s |
| 4. Arthur Eddlestone (Kent)  | 16h 55m 29s |
| 5. Mark Kleanthous (Sussex)  | 17h 20m 21s |
| 6. Stephen Till (Essex)      | 17h 23m 43s |

**WOMEN**

- |   |             |
|---|-------------|
| 1. (31st overall) Brenda Yule (Cleveland) | 19h 54m 52s |
|---|-------------|

Paul was responsible for the race walk section. When the event was first dreamed up and he was approached to join the organising committee he immediately thought of Steve Upton as an absolute natural for the event and after persuading his wife Mandy he would come to no harm he agreed to take part. She originally opposed the idea!

His training schedule is now history but it meant rising at 3.00am every morning and training up to four hours! Naturally he supervised his race walk coaching which proved to be very valuable in the marathon when injury prevented him running.

Richard Crane will not contest next year's event; Steve has indicated he will not only compete but go for a win. Certainly he will be the man to beat! Steve also won a trophy for being winner of the bicycle race section which he won in style so he received two trophies and a medal for his efforts. He subsequently enjoyed a holiday with his wife in Nice.

## Visit of Chinese Ambassador

As part of a round of visits to British industry, the Ambassador of the Chinese Republic visited MAV on 17th August. Here he is seen with his wife, being shown one of ADD's head-up display systems by Mr. Peter Hearne.





# Around the Divisions

## Combat Aircraft Controls Division

The problem of controlling an unstable highly agile aeroplane has been likened to a man kneeling on the bonnet of a car, holding a bicycle by the handlebars and steering it backwards while doing 60 mph. In these circumstances the bicycle is unstable and the resultant breakaway and destruction would occur in seconds, since the guidance corrections required to maintain the bicycle in a straight line would be so small, and be required so rapidly, that the human being would be unable to cope.

In future high agility combat aircraft, guidance instructions will need to be issued by high speed computers to the control surfaces many times a second to match the aircraft's behaviour precisely to the pilot's demands. Such computers and other associated equipments in the automatic flight control system are the bread and butter of the people working in the Combat Aircraft Controls Division (CACD). Modern flight control techniques known as "fly-by-wire" allow the aircraft designer to make the most of new ideas in aerodynamics, propulsion, materials and fabrication. Current combat aircraft designs have no reversionary controls of any kind and rely on systems specially designed to survive multiple failure for their safety. It is an exciting and complex business, the success of which is crucial to the operational effectiveness of future combat aircraft.

The Company has a long record of success in both analogue and digital advance flight control systems and has pioneered many new developments in multi-channelled safety critical



The spacious Production Area of CACD.



The Apticon CAD facility in use.

control systems. As a result of the continuing expansion of the Company's flight controls business, CACD was formed in early 1980 to look after the design and manufacture of flight control systems specifically for combat aircraft projects, and moved into the new custom built Phase III building in September of that year.

The Division currently employs 465 people on a variety of projects, with everyone working in air-conditioned accommodation and many of them equipped with modern computer aided design, manufacturing and management facilities.

### Tornado

The Company is the prime contractor for the Tornado flight control system which consists of three major sub-systems; Command and Stability Augmentation (CSAS), Autopilot and Flight Director (AFDS), and Spin Prevention and Incidence Limiting (SPILS). This programme has been part of everyday life for CACD for over 10 years and completion of the major manufacturing programme of over 1000 systems should sustain the Division for several more years.



The CSAS, AFDS and SPILS family of computers.

The CSAS is a complete fly-by-wire manoeuvre demand system that provides the pilot with a three channel system for controlling the aircraft in pitch, roll and yaw as well as ensuring good handling in turbulence.

The digital AFDS provides automatic control of the aircraft in the pitch and lateral planes in a variety of operating modes. A flight director facility provides signals to the pilot's instruments to enable the pilot to monitor the autopilot performance when the aircraft is being flown automatically, and provides flight path guidance to the pilot via the head-up display for manual flight.

The SPILS is designed to prevent loss of control at high angles of attack and so allow more operating flexibility.

The Tornado entered service in 1981 and a total of over 40,000 flying hours have been achieved. The flight control system has earned high praise from air and ground crews alike for the effectiveness and reliability with which it performs.

### Aeritalia Macchi Embraer (AM-X)

CACD is co-operating with Aeritalia GE in the design, development and production of the electronic flight control system for the AM-X which is a single engine combat aircraft especially designed to survive malfunctions or battle damage with a minimum of on-board equipment. The system provides fly-by-wire control of the tailplane, spoilers and rudder together with the mechanical elevators and ailerons. In addition automatic pitch, roll and yaw stabilisation is incorporated. The cordial working relationships established between the Company and Aeritalia GE on the Tornado AFDS programme are being continued on the AM-X and, following the planned first AM-X flight in 1984, should lead to a long and fruitful production programme.



A model of the AM-X.

The equipment consists of two dual-redundant flight control computers based on 16-bit microprocessors organised for specially developed fail-safe software and driving seven aircraft control surfaces. A MIL-STD 1553B interface is provided.

To optimise hardware requirements, analogue computing is used for the actuator control loops, the pilot command paths and the rate damping computations. The 28002 microprocessors in the flight control computers monitor the system performance and handle gain schedules, electronic trim and airbrake integrators.

### Jaguar Fly-By-Wire Demonstrator

The Jaguar Fly-By-Wire demonstration programme is intended to prove the design concepts, hardware and software needed for advanced active control technology to be incorporated from the outset in the next new combat aircraft such as the Agile Combat Aircraft currently being designed by a tri-national industrial consortium.

The FBW Jaguar has an all digital quadruplex control system with no mechanical control runs or reversion of any kind. It is capable of surviving all probable failures and was the first truly practical digital active control technology aircraft to fly with its equipment made to production rather than development standards.

Four independent electrical channels relay instructions in the form of electronic impulses generated by four main high speed, mutually self monitoring digital computers. These are linked with a further two subsidiary actuator drive and monitor computers which lead to the six-lane failure absorption actuators.

The computers are programmed to ensure that any commands are kept within the limits of the aircraft's flight capabilities. These capabilities and the control response are optimised to give the best possible aerodynamic characteristics and handling for the pilot.

The avionics have been manufactured to production standards and provide a ready basis for future advanced flight control applications.



Jaguar fly-by-wire demonstrator.

The FBW Jaguar first flew on 20 October 1981 and through a highly successful flight trials programme has already demonstrated that a full time fly-by-wire system can be implemented safely, and meet airworthiness criteria similar to those of other modern high performance aircraft.

CACD is now striving to exploit its success on the Jaguar FBW programme in an effort to win contracts on other programmes both in Europe and the USA.

In other fields the Division enjoys a good social life, well organised by the CACD Social Committee, and is not slow to show its prowess in the sporting arena. Aky led by the Divisional Manager, Ray Reese, who won the Veteran's 100m sprint and Mrs. Rosa Hargrave-Sutherland who won the Victor Ludorum, the Division recently won the Management Trophy at the Rochester Sports Day. In addition the Engineering Department has provided eight men (including the Technical Manager, Gordon Belcher) who between them have completed 14 marathon runs in 1982-83.

## The Road to Delhi

After David Clews moved to FGD in 1981, MASD's Engineering Manager Brian Teather took on the task of commuting backwards and forwards to Delhi in support of Westland Helicopters' marketing and sales programme to sell their ASW Sea King helicopter to the Indian Navy. Many of these visits were made at short notice and often in the height of summer.

The negotiations were prolonged and characterised not only by fierce competition from the French with their Super Puma, but also by the Indian Navy's requirements for full specifications for the projected avionics fit at all stages. After which the specs were adapted and refined according to budget constraints etc.

The equipment fit finally evolved and to be supplied from MASD will be a Tactical Mission System consisting of an AQS 902 sonobuoy processor, a Tactical Processing System, and includes the integration of data from other sonar systems. Outputs will be provided to weapons and other systems in the helicopter. Operating is carried out from a dual operator's console using common display, control and processing modules.

To arrive at a satisfactory solution required considerable patience, stamina and much writing and rewriting. Added to which frequent communications with home base was necessary. During most of the period, however, the Indian telecommunications network was being updated. To say the least, local calls were quicker "by taxi" and international by appointment only.

Health can often be a problem, but most of the worst bugs were avoided thanks to M&V Surgery and an occasional whisky. Every day hazards such as crossing a road takes on an entirely new dimension,

priorities appeared to be: cows, lorries, buses, cars, tricycle-cars, scooters, cyclists and pedestrians.

Where do other animals fit into this hierarchy? However, a stray horse was seen standing (apparently unharmed) in the middle of a busy dual-carriageway traffic lane for more than an hour. Probably just as bewildered as Brian.

Despite many trials and tribulations, familiarity with the Indian scene does bring out its many attractions which cannot be fully appreciated on business trips. There are splendid palaces (legacies from the days of the Indian Princes), forts, temples and tombs to visit including the



fabulous Taj Mahal at Agra. Visits to these, albeit too short, and acquaintance with local people can bring out some fascinating insights into their attitudes and reflections of Britain's past involvement in this heavily populated sub-continent. One Taxi driver, a WW2 British Army veteran of Libyan battles, was most anxious during the tangle with Argentina to give us the benefit of his experience to win the campaign.

After all that, are we there? Well, not quite, another visit is on the cards for some further refining of the equipment specifications. So, its yet more arm punctures, more crowded 747's more spec. writing and rewriting... and more curries!

## Appointments and Promotions

C.C.F. Naylor has been appointed Commercial Director of Marconi Avionics Ltd., based at Rochester.

At Nalaisea, Peter Harvey has been appointed Project Manager responsible for engineering project management aspects of the division's Power Conversion programmes, and K.G. Bailey has been promoted to Chief Draughtsman.

At Rochester, we record the appointments of Dr. A. Runnalls as Engineering Manager, ATE, and P. Robbins as Production Superintendent, ISD.

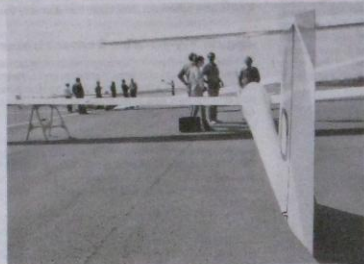
23-31 JULY 83

MARCONI AVIONICS

promoting Excellence in Aeronautics at the

Lasham Gliding Centre

# The Marconi Avionics National Gliding Championships



An entrant waits for launch, his fibreglass wings filled with water ballast and supported by trestles.



Your editor only just managed to squeeze in, but in these tiny cockpits competitors spend several hours each contest day racing round pre-set tasks which may cover 500 kilometres in a day. Using maps, a met briefing on his knee-pad, and his instruments (which often include a computer), the pilot extracts the most from the day and his glider.



All launching was by aerotow – the glider is towed to 1,500 feet above Lasham Airfield by one of 10 tugs, specially gathered for the event. Tugs have to be single-engined aircraft of not less than 150 hp.



Modern sailplanes are constructed from stress-bearing epoxy resin fibreglass, sometimes reinforced by carbon fibre. They have retractable undercarriages, flaps, water ballast, air brakes and full instrumentation including radio and specialised gliding computers. Wing spans vary from 15 to 24 metres with weights from 400 pounds dry to 1,000 pounds, when filled with water ballast.



During the Championships, a large number of leading aerospace personalities attended with their families.



The wife of BAA Chairman Sir Austin Pearce preparing for a flight under guidance of Mr. Heame and the pilot.



This is where the new cone constant use shuttling visitors.

The latest information each day...  
Mr. David Michie, Parliamentary Under-Secretary of State for Transport, visited the Championships and was talking with Dr. Peter H...

Gliding competitions have come a long way since the early 30's when in Germany the winner was merely the one who flew the longest or the furthest. To enable Ralph Jones to achieve his win in the Open Class a host of back up facilities was needed as well as his own skill and experience. Firstly, his glider. The first known gliding enterprise was when a certain Yorkshireman launched his coachman across a dale, after which the unfortunate pilot gathered his wits and resigned. That glider is believed to have dropped by one foot for every five frown forwards. Today an advanced machine incorporating glass fibre, carbon fibre, and Kevlar in its construction will achieve over fifty feet for one foot drop, and the skill of the pilot in exploiting thermals and airflows over hills can result in flights of over 1000 miles in some countries. The UK record is from Lasham to Durham and back in one flight on one day. Wingspans exceed 80 feet and the aspect ratio is high, the finish of the surface is highly polished. A dead insect,

speck of dust or droplet of water can badly degrade performance. Secondly and onwards, the running of the competition involved a host of factors and support activities. You need an airfield big enough to handle safely the entry – about 80 this year, and the residential facilities, phones, repair facilities, camping, and glider parking facilities. None of this can be too near major airports. You need means of getting gliders into the air, often done by towing behind a vehicle but at the Championships by tug aircraft. With 10 tugs the 80 gliders were able to be airborne within 2 hours, but time separation was still vital for safety. The weather conditions are crucial for successful gliding. Contrary to expectations a heat wave is not the best – still air does not encourage the thermals in which the gliders will soar, and blue skies do not make the thermals very visible. In the event of thunderstorms, upper level cloud and other factors

prevent competition flying on some days; humidity caused bad visibility and some pilots missed the way. To prepare for the Contest Director's planning, meteorologists rose very early to digest the information from European weather centres by direct link with Paris and with the RAE satellite tracking station which just happens to be at Lasham. The daily objective was to set the largest task that most of the field could finish in the expected conditions. Typically, this was a triangular course like Lasham – Shaftesbury – Frome – Lasham (200km) or to Bath Racecourse and Birdlip Hill, Cheltenham (254km). To prove that they had been there, the pilots had to record waypoints and turning points by instrument camera. Any illegal landing would be revealed by the recording altimeter. Starts and finishes were over lines defined by ground marker and measured height; competitors passing successfully through these holes in the air were credited with accurate times and notified by the compulsory

# INTERNATIONAL AIR TATTOO '83



... technology was used to gather weather data to help the organisers set the competition tasks.



Not all those on the runway are expecting to fly!



Mr. Jack Pateman inviting Sir Austin to distribute the impressive display of hardware.



... just taking up his appointment as Under Secretary of State at the Department of the Environment. Here he is with Tom Zealley (left) Chairman of the B.G.A. team.



Who are the little green men? The colour doesn't show, but they aren't wondering which way their glider went, just resting from their hard work in helping launch and recovery of the 80 machines.



... first sprouted. The bus was in use to and from their glider flights.



'Uilo, 'uilo, what are you doing with our Trophies?'

radio. Pilots could choose their start crossing times and there was much tactical hanging about for the best anticipated conditions, but finishes were much more spectacular and often involved high speed passes at ground level up to 150 m.p.h. Scores were assessed by handicap, distance flown, speed, and the number of competitors actually completing the task. Ideally all competitors would have finished but the weather was not always kind.

On one day only 3 pilots made the course, so 'no contest' was declared; retrieval teams spread out far across the country, having been notified by control who had to be kept informed by radio of every gliders' position.

Ground marshallers and little green men had the task of seeing that everyone was in the right place before launching began; launch order was by daily rota to give all the pilots a fair chance of the weather.

The Company's part in all this was not to undertake the

organisation - this was done with superb expertise by the Lasham Gliding Centre and British Gliding Association officials and volunteers. It was to bring to the notice of distinguished visitors including politicians, civil servants, many senior people in aircraft industry and service walks of life, and to the aeronautical world as a whole, the thought that "Excellence in Aeronautics" as illustrated by successful endeavour in the art and science of gliding, is a theme with which the British aerospace industry and Marconi Avionics in particular would wish to be associated. By sponsoring this Championship the Company has without doubt gained prestige in aviation circles and given invaluable support to the gliding movement as a whole.

A big occasion which does not spring to mind as readily as the Farnborough Air Show, or the army occasions of the Royal Tournament or Edinburgh Tattoo, is the International Air Tattoo which over the last ten years has been held at Greenham Common near Newbury. This year MAv made contributions by sponsoring activities forming part of 'STAR '83' - the world's first Strike, Attack and Reconnaissance Meet, which included air and ground competitions attracting entries from over 60 air arms from 25 nations. The meet was designed to promote the exchange of views, ideas, information and techniques between participants and with industry.

The various exhibitions, displays and competitions provided interest and entertainment for over 1/4 million visitors. All proceeds from the tattoo are destined for the RAF Benevolent Fund. The event also paid tribute to the late Sir Douglas Bader who was president of the Tattoo. In his honour and memory, a Spitfire parade formed part of the seven-hour flying display programme, and the RAFBF is endorsing the Sir Douglas Bader Flying Scholarships scheme which will enable young physically disabled people to attain PPL status. MAv's contribution included the donation of two trophies for winners in the competitions, both flying and on the ground. Activities covering the STAR theme such as Flight Planning; accurate navigation; location, recognition and identification of targets; practice attacks, and air/ground photography, as well as a range of challenging tests for initiative, resourcefulness, determination and teamwork in a series of events related to aircraft operations, were included. Our trophies were awarded to teams for Best Target Recognition - UK entry (3 members of ground crew, 16 Sqn., RAF Germany) and Best Target Recognition - overseas entry (Team for Tactical Fighter Wing 35, German Air Force).

The trophies were made by Simon Fagan, a final-year apprentice at present working in ADD Model Shop, following a design already used for other team and individual presentations and first made by Don Short when he was Chief Instructor at Hopewell Drive.

In addition, a paper was contributed by ADD to the one-day Symposium which was attended by many prominent guests such as foreign service attaches, senior officers of many overseas armed forces, MOD officials, procurement executives and the aeronautical press.

The whole event has been rated as an effort very well done, and a worthy shop window for our activities as well as an important contribution to the increasing demands which have to be met by the RAF Benevolent Fund.

The two trophies awarded at STAR '83, with Simon Fagan.



# RETIREMENTS

A popular figure in AS&R and throughout the factory has retired. Gordon Wickins, Admn. Officer, first joined the Company in Swift and Swallow days after Army service in North Africa. See the epic poem below contributed by his Division, for a full account. Gordon was presented with a portable TV by recently retired Commercial Manager, Bill Ecob, together with cards with signatures from many divisions. He also received a large cake from Commercial Department colleagues. Many interests including his well-known gardening efforts will keep him busy during retirement.

## Wickins World.

*O Gordon Wickins, what a man,  
Describe him, well of course you can,  
With any phrase, "One of the best",  
But Gordon stands above the rest.*

*From leaving school at fourteen years,  
With little thought about careers,  
Doubled that he'd reach the top,  
For the local branch Co-op.*

*He worked till sixteen thirty-nine,  
When call-up came, he stood in line,  
Then off to be a big gun sniper,  
In the I.A., a "Tommy" sniper.*

*From Middle East and all points West,  
Returned for "Guns" with the rest,  
For service with the best he'd bring,  
War on the beach with Swift and Swallow.*

*Though times were hard, some "Yank" side cheer,  
With mutual trust and love of beer,  
The last would surge round the trenches,  
Come leader orders to fulfill services.*

*So all took place in forty-six  
With Swift and Swallow in a fix,  
When "Pearl" ready and ready up,  
With shoulder up meant you would lose.*

*But not for Gordon, as he went,  
The able, shaggy Alex of Kent,  
Drove the Firm of E.B.L.,  
Come out to Swallow Swift as well.*

*He'd set up home near Barking Station,  
And turned his hand to cultivation,  
Spent lots of cash on plants and seeds,  
And battled with the flowering weeds.*

*Behind gardening hand of youth,  
He helped to build the Social Club,  
And the terrace for sports club soccer,  
And hand to foot his first time, cricket.*

*He also shows upon the court,  
As soon as he was at some sport,  
In whether working, or at play,  
He was outstanding in his day.*

*So Gordon spent the best few years,  
Caring, making, grinding gears,  
But when the Co-op moved Durdent way,  
He proposed to the last name boy,  
From where without a deal of fuss,  
Made one more move, from there to us.*

*The several years he'd filled since then,  
Would take an age for me to pen,  
Trying to say it quite a tale,  
He's done the lot in his own style,  
Through time cards, changes and E.C.P's.*

*As a hobby chief he made no fuss,  
In mounting things for sale of fuss,  
From around here, to back, in cheer,  
He's done the lot with skill and care.*

*And he who dares to take your place,  
Will have a moment's task in fact,  
As from the past service you endeavor,  
Some small part of "Wickins World".  
To make the job of E.C. Division,  
To outpace you, Gordon Wickins.*



Gordon (L) receiving his gifts from Bill Ecob. (A)

June Richardson, Data Processing Controller in AS & RD, retired on 25 August.

June had done several years of voluntary work before joining the Company in 1967 as an Electrical Inspector in ATE Division. June worked there for nearly five years before setting off to live in Australia.

June returned to England and the Company only 18 months later when she became a Statistics Clerk in AS & RD and in 1977 she was promoted to DPC (Sub-section Leader).

On behalf of her friends and colleagues within the division, supplies Manager Mr. Bill Andrews presented June with a large painting. June also received several other gifts from her close friends.

Assistant Production Manager. Her husband Ernie has also been with IND - he went to Australia on their behalf for 2 years; and is now with Fisher Controls.



Glad Smith. (D)

Bill Ecob, Commercial Manager, AS & RD was presented with a set of crystal glassware and a picture by Mr. W.H. Alexander, when he retired after almost 30 years' service on 21st July. Mr. Alexander paid tribute to Bill's work first as liaison man with Bendix and then after the formation in AS & R in 1959, since which time the business had grown over 30-fold and five Divisional Managers had served under him. His cheerful personality even in the bad times and his constant striving for improved performance would be remembered with gratitude by all that worked with him. A splendid record for one who claimed to have got the job by mistake.



Bill Ecob. (A)



Harold Scutt with Contracts Manager Norman Pearson.

Glad Smith, Leading Hand in IND has retired after 18 years with the Company, of which the last 8 have been in IND. Before that she was ACD and Radio/Radar Divisions. As well as her day-to-day responsibilities at work, Glad found time to indulge her hobby of cooking by providing many cakes for her colleagues' various occasions, and the picture shows her with the food processor and other gifts which she received from Brian Box.

Archie Briggs retired in August following over 30 years in the Buildings Maintenance Workshop. Don Freeman, Deputy Works Engineer, presented him with a hedge-trimmer and cards recording the good wishes of many colleagues. Before joining the Company Archie served 6 years in the Army as Despatch Rider, and was a Riveter with Short Bros. He hopes to enjoy his retirement with more time for DIY, gardening and bowls.

# 25 YEARS' SERVICE

On August 5th Gerry Arger received a presentation mantelpiece clock from Alan Teers, Manager, Production Engineering Services. Gerry is now Production Engineering Manager in that team; he started his career with the Company with English Electric and when he came to Rochester in 1963 he spent a short time in Engineering before becoming Chief Production Engineer, Flight Instruments Division, in 1964. In 1967 he joined All Harrison's production engineering team and for the last ten years has been in his present position. Over the years he has undertaken many tasks involving stays overseas and was closely concerned with setting up the Company Standards section. Among his interests are Chairmanship of the Rainham Youth Link and membership of Gillingham Lions.



Gerry Arger (R) receiving his clock from Alan Teers. (A)

Jim Carter joined Swift and Swallow export department in September 1956 from local government and the Royal Air Force.

In 1960 he transferred to TAC Division to become their Cost and Budget Officer and then on to FID/ISD in 1964 in the same position. Whilst in ISD he was promoted to Contracts Manager.

1976 saw him join his present division, Gyto, to take up the position of Commercial Manager. Always a popular person, Jim has an interest in most sports and was once a noted table tennis player. He is a family man with one daughter.

His chosen gift, a wrist watch, was presented to him by the Divisional Manager Mr. Alan Essex.



John France. (A)

John France, Quality Assurance Manager ISD, was presented with a pair of binoculars by John Colston, Divisional Manager.

John joined the Company in 1958 (at Borehamwood) from Imperial College London.

He worked on the design and development of the Inertial Navigator for the Blue Steel Guided Bomb; and became responsible for the liaison between Borehamwood (where the equipment was being developed) and Rochester (where the equipment was being built).

In 1961 he transferred to Rochester and continued work on Blue Steel and then started the inertial work on the E3 Heading Reference System for the Nimrod.

In 1967 he was made Chief Engineer of Aircraft Engine Instruments Division who were concerned with the design and production of flowmeters and engine instruments for Concorde, Harrier, Phantom, VC10, BAC 1-11, etc.

In 1970 AEID were merged with FID to form ISD and he became Q.A. Manager, a position he still holds.

John is interested in the education of Engineers and has worked for the past 5 years on the formation and monitoring of the Bath University Industry Linked MEng Course.

His hobbies have always been concerned with sport and for many years he played tennis and soccer and was a soccer referee in local football. His main interest now is golf and he has been Chairman or Vice Chairman of the Company Golf Society since its formation in 1969.

For the past 10 years he has been Secretary of the Kent Branch of the British Institute of Management.

## OBITUARY

We record with sadness the death of Darrell Prestage at the age of 27. Darrell was a Technical Assistant on the MRCA project in ATE. He joined the Company in June 1973 and for most of his time was in FCD/CACD, transferring to ATE last year. He became ill with a form of cancer and although he returned to work in April this year he died on August 9th. A floral tribute was sent by his friends to the funeral which took place at Woodlands Cemetery, Gillingham, and a collection is being given to the Royal Marsden Hospital where he died.

# THE WORLD'S TOUGHEST RACE QUADRATHON AUGUST 20<sup>TH</sup>-21<sup>ST</sup>

Last spring Paul Nihill of ATED Contracts Department and Olympic silver medallist wrote about the arrangements being made for the Quadrathon. Following Steve Upton's great effort, Geoff Randa, Sales Manager of the Division, has talked to Steve and has given us the following contribution.

What's the connection between 3 o'clock on a cold dark February morning, and a dip in the briny off Brighton Beach at 5 o'clock on a sunny August afternoon? You've got it — the Quadrathon — that masochistic medley race from the pier end to Gravesend. The modes of transport used to complete the journey fit better into a mathematical problem — "if it takes one person one hour to drive by car from Brighton to Gravesend, how long will it take 74 people to swim, walk, cycle and run the same course?" The number of unknowns in that equation are about equal to those facing the competitors in the 1983 Quadrathon!

Steve Upton began training for the event last February. To get in the necessary hours meant getting up at 3 o'clock in the morning to do 3-4 hours five days a week, running 27 miles or cycling to Blackheath and back before coming into the factory. At the end of the day's work he'd go to the Black Lion pool and swim for an hour or so — "breast stroke — I can't cope with free style yet but will do by next year" — then back home to his wife and pet cat to have a meal before getting to bed at 8 o'clock and sleeping for around 7 hours before starting another day's training. In the year before the Quadrathon he completed 3 marathons. Mind you, he's well used to arduous training — did you ever see the TV programme about the Royal Marine's field gun team getting ready for the Royal Tournament? Well, Steve was in the "Pompey" team in 1976. Come to think of it, would the coach of the gun team have been welcome shouting "encouragement" (if that's the word) to a lone runner along the empty streets of the Medway towns before dawn on a winter's morning?

Fitness has been a large part of Steve's life from his school days where he took part in more social sports like rugby and cricket — "that's how I lost my front tooth". He's not the loner type of long distance runner, but as you can imagine, he has little time to spare from his keep-fit programme for anything other than his interest in motor cycles and necessary DIY around the house. He knows that mental fitness — the tuning of the mind to cope with an unwilling body — has to be of a standard equal to or better than physical fitness. No doubt getting up regularly at 3 am in a British winter is equivalent to an 'A' level in mental fitness!

On the day of the event Steve weighed in at 149 lbs — you'll know by now he finished in second place. Originally, there would have been 100 men and 10 women jumping into the sea on 29th August but accidents during training, ill health etc reduced the number of actual starters. (The last person to finish took 26 hours 1 minute to get to Gravesend — but she was sponsored to the tune of around £1000 just to complete the course — and she did.)

His own account of "the day is modest and laconic". "... well, I had a big breakfast, checked the bike, went to the briefing, had an hour's

kip, ate some pizzas (very good for a pre-Quadrathon snack — full of carbohydrates) and then joined the others on the beach waiting for Jimmy Saville to fire the cannon and get us under way." Steve didn't even bother to slick his toe in the sea to test the temperature before plunging in for the 2 mile swim but, although some entrants suffered from hypothermia, he reckons the sea was just right and Brighton Fire Brigade's 'shower' at the end of the swim was terrific. His 53 minutes in the water put him around 14th place and over an hour ahead of the last to emerge from the sea (a 47 year old who held the world record for carrying a 1 cwt sack of coal for a distance of 24 miles — he's since changed coal merchants!). Because he hadn't covered his body in grease before the swim, this wash down to remove salt (they do that to Nimrod's you know) was enough and he was soon underway on the walk — about half an hour ahead of his schedule.

In fact there was no schedule as such in Steve's plans — as he intended to go at a comfortable pace in all stages because as he says "if I'd got behind my schedule I might have panicked and then pressurised myself to catch up and that's no good on a thing like a Quadrathon." The back-up team which included, Mum, Dad and wife were regularly repositioning themselves along the A26, A27 route so that they could be ready with refreshments. Throughout the whole event Steve ate 5 small bars of chocolate (fun sized Mars and Milky Ways) but drank 16 pints of fluid (most of which was lost again through sweat but for the curious minded, yes, he did have to nip behind the hedge 4 times during the 16 hours).

The cycle ride to and around Brands Hatch was enjoyable but didn't bring delusions of grand prix since lapping in 2 minutes 20 seconds hardly compares with your turbo powered Ferrari, however, he did lap 7 times the man who was first away and topped other competitors many more times. Typical of Steve's down to earth approach to the whole affair is his answer when asked how he chose his machine, "I went to a bike shop and asked". His bike cost about £300 which isn't expensive in the class because you can pay £1000.

Fitness is about the body's ability to recover quickly after strenuous exercise. At the 'medical' following the cycling, Steve's vital statistics were: pulse 80, blood pressure 120/60 — the sort of figures normal mortals strive for after a good night's rest! So, having swum, walked and cycled, now there was ONLY the marathon. By this time, it was daylight so compared to those dark winter mornings six months previously it was a much more pleasant experience — if you like that sort of thing.

What did Steve do during the day after the Quadrathon? "Well, for a long time I leaped and jumped around celebrating having finished the course, I didn't feel the aches and pains for 2 or 3 hours and I had only one blister on my foot. I had a beefburger around midday, scrambled eggs for tea and then slept eleven hours. It will take a couple of months for my mind and body, but mostly my mind, to get over this event so that I want to, and am able to, push myself to the limits again. I'm looking forward to the Quadrathon in 1984."

## Sports and Social Club round up

### Sailing Club News

Over the weekend of the 13th/14th August, two boats made the long trip from the Marconi Club on the Blackwater River to the M&V BP Club, at Colemouth Creek, Grain.

The boats making the visit were "Roanoke" crewed by Denis Byatt, Malcolm Stuart, and Marconi Club Commodore Frank Savill, and "Blucett" sailed by the Bingley family, Skipper Ben, 1st mate Christine, 2nd and 3rd mates Mark and Shane.

The crews had very good conditions to sail down the Essex Coast with the wind N/E force 2/3. Having first encountered the lovely old sailing barge and the Otis Line ferry lying for line honours at Garrison Point, they arrived at 7 o'clock at Colemouth creek, where they joined other overnight visitors "Puff Dragon" (Tric West) and "Lady Amanda" (Brian Herring).

A social evening had been arranged by the M&V BP Club members. Pauline Beldham and her stalwart lady helpers again provided the excellent buffet.

The evening proved an enormous success with the guests in great demand. Roanoke sailed on Sunday morning at 06.00hrs in very light winds, Blucett having left slightly earlier.

They rendezvoused at the Warsps buoy and together they made the Spitway by 11.30, the wind then died completely and they were forced to motor to the Marconi Club and their moorings, arriving at 14.15.

The M&V BP Club members wish to thank their visitors for making the long trip and they look forward to the return visit and sailing match next year in the early summer.

### Forthcoming Events

The laying up supper will be at the club on 22nd October. The section AGM is the 28th November at 20.00 hrs at the parent Club, Hoo.

Presentation of the Colwyn Stone Trophy to Peter Belcher at the Dinghy Club Sailing match, held in June at the Marconi Club on the Blackwater river — reported in June issue.

Mrs Joan Stone presented the Trophy; looking on are Jack Pateman, John Gilson, and Frank Eastwick. They had sailed Frank's "Salar" from the Medway to be present.



### Inter-Divisional Cricket Competition

This year's competition was keenly contested between 14 teams from throughout the Company, at the M&V BP Club during the sunny months of July and August.

The four teams to reach the semi finals were ATE, MASD, AS&R and the Training Dept. In the first semi, MASD made 124 for 9 of their allotted 20 overs and just managed to contain ATE who finished 100 for 8.

The second semi didn't turn out to be quite as high scoring, with the Training Dept setting AS&R a modest total of 58 to win, which they achieved quite comfortably.

So the climax of this year's competition was to be a final between AS&R and MASD.

With both teams at full strength a fine game was in prospect and what a match they produced! MASD won the toss and elected to bat.

After a cautious start and an early loss of opening batsman D. Jenkins, D. Stratton and C. Pack made steady progress pushing the score along until Pack was caught for 29.

Dave Stratton went on to make an unbeaten 59 out of an MASD 20 over total of 114 for 3.

AS&R started their reply with openers R. Mercer and T. Crickmore who between them made 80 for the first wicket, Mercer (51) who hit five 4's and two 6's swung the bat once too often and was brilliantly caught on the run by MASD Captain G. Cordier only feet inside the boundary.

Simmonds followed that dismissal by bowling T. Crickmore for 36 with the score on 94 with 4 overs remaining.

From this point things started to go wrong for the batting side and they quickly lost 4 more wickets. With one over remaining 8 runs were required to give AS&R the trophy, but it wasn't to be.

After a couple of wides and some panic in the fielding, Simmonds stepped up to bowl the last ball of the match with AS&R requiring only 2 runs to win. John Brecken could only block the last ball and MASD had won!

Congratulations to both teams for serving up such a marvellous match!

In the third and fourth play-off the Training Department scored 104 for 8 but ATE could not score more than 85 for 8 in their 20 overs.



The winning team — MASD  
Back row L-R: Duncan Jenkins, Colin Pack, Dave Stratton, Bob Wilkinson, Mike Ryder, Gary Cordier. Front row L-R: Graham Williams, Mark Colton, Nick Simmons, Gerry Woods, Ray Rich, (Dave Golding — not present).

## A TIMELY REMINDER

While welcoming the new intake of apprentices (and other trainees), we ask them to note the terms of the above indentures as a supplement to those which they may be signing in due course. The transcript is of the original indentures signed by William Elliott, who started business as an instrument maker in 1799. His two sons continued the business as Elliott Brothers (London) Ltd, the

forerunner of our present Company. It was only a few months ago that the Rochester and other units of "Elliott's" finally ceased using that name; all our contracts, business documents, conditions of service etc were altered to Marconi Avionics Ltd's name in April last year.

**W**his Indenture Witnesseth that William Elliott son of William Elliott of Tash Court Greys Inn Lane in the county of Middlesex, Yeoman no money being paid to him doth put himself apprentice to William Backwell of Tash Street Greys Inn Lane in the said county compass and drawing instrument maker to learn his art and with him after the manner of an apprentice to serve from the day of the date of these presents unto the full end and term of seven years from thence next following to be fully complete and ended. During which term the said apprentice his master faithfully shall serve his lawful commands everywhere gladly do. He shall do no damage to his said master nor see to be done of others but to his power shall let or forbearth give warning to his said master of the same. He shall not waste the goods of his said master nor lend them unlawfully to any. He shall not commit fornication nor contract matrimony within the said term. He shall not play at cards dice tables or any other unlawful games whereby his said master may have any loss with his himself towards his said master and all during the said term. And the said William Backwell his apprentice in the art of compass and drawing instrument maker which he useth by the best means he can shall teach and instruct or cause to be taught and instructed finding unto the said apprentice convenient meat drink and lodging during the said term. The said William Elliott the elder hereby covenanting to find the said apprentice during the said term good and sufficient wearing apparel both woollen and linen medicines and all other necessaries for his instruction and lodging. And for the true performances of all and every the said covenants and agreements either of the said parties bindeth themselves indifferentially have put their hands and seals the fourteenth day of April and in the thirty fifth year of the reign of our sovereign Lord George the Third by the grace of God of Great Britain France and Ireland King defender of the Faith etc and in the year of our Lord One thousand Seven hundred and ninety five.

*The indenture given before or Contract made here date the day it is executed and what money or other thing is given or conveyed for which the indenture is made shall be inserted in words at length and the duty paid in the stamp office if in London or within the County, and out of the said City of London within two months after the execution and in the County, and out of the said City of London within two months in a distributor of the stamps or his substitute otherwise the indenture will be void. The master or mistress before fully executed and the apprentice be delivered to Andrew Broughton or his master free. Sealed and delivered in the presence of Saml Collinsridge*

William Elliott

William Elliott

William Backwell



# Sports and Social Club round up



## MAV-BP KENT CLUB 2nd AGM

on Thursday 26th January 1984  
8pm in Ballroom

Members are hereby advised in accordance with  
Clause 6 of the Constitution

Proposals to be received by  
28th October 1983

## Squash Section

The annual general meeting was held at the Hoo Club House on August 24, completing the section's first full year.

Activities throughout the year were an open knockout tournament and a few friendly matches. The tournament attracted a large entry which unfortunately consisted of non section members. The friendly matches were a greater success for us and resulted with the section unbeaten.

We hope to maintain this good start in the coming year with our first season in the Kent League.

As this is the beginning of a new year we are now seeking new members. Our only failure in the last year was only having one female member, we would like to improve on this. Anyone interested in joining the section is welcome to come along on section nights, Monday and Thursday from 7.15pm onwards. Beginners and even experienced players are all encouraged and usually improve their standard of play. If more information is required please contact the secretary John Hollands - (MASD Cost and Budget) Int. 2547

## '65 Club

Since our last review of the activities of the '65 Club (retired personnel) much has happened, and changes made.

On July 8th, about 140 members had an enjoyable day out, when we had an outing. Travelling through the countryside of Sussex, in beautiful summer weather, we arrived at Bognor Regis, where for a period of 4 hours the facilities of this quiet, though delightful resort were greatly enjoyed. The warmth and continuous sunshine made it a day to remember. Calling at Arundel on the return journey, we passed through villages not seen on the outward journey.

The July meeting, was the first to be held at the works canteen. As the club members assembled there were mixed feelings, after 18 years at Featherby Road, but with minor adjustments to the seating arrangement, all settled down to a new era.

After the business meeting, the entertainment was provided by the "Mary Underwood Prep and Stage School", who presented

acts of group dancing, miming, drama and solo items. The whole programme being well balanced, with good timing and efficient execution, especially for some so young, gave the audience an experience which will not be forgotten for some time.

Supper period turned out to be good, and the activities of the canteen management and staff - who also did Bar Service - was much appreciated, and set the seal on future meetings in the new venue.

The August meeting held on 16th, was very well attended. At the business meeting final details of the Company outing to Woburn Abbey were made, and pick up points arranged. The entertainment was provided by a trio, with the chairman's daughter being the leader. The programme consisting of music, singing and dancing with the audience participation, made it one of great enjoyment.

The outing on August 31st, provided by the generosity of the company management set off from the works canteen, after Mr. A. Ellis had greeted the travellers on behalf of the management.

The day was spent at Woburn Abbey, enjoying the spacious grounds, treasures of the House, gardens, exhibitions and all the attractions on offer. Thanks were expressed to the canteen management and staff, for the excellence of the packed lunches, which were enjoyed in the sylvan setting of the parklands, before sampling the attractions.

With wonderful weather, this day was one, not only full of enjoyment at the time, but will live on in the memory of the 3 coach loads who participated.

## Golf Society

A couple of issues ago we reported the winning team in the sponsored stroke play competition at Hill Naval Base. The picture shows them with their trophy which is now hung in the new Bar Lounge in the Canteen.



## Bat and Trap

The final of the inter-divisional Bat and Trap competition was played between ADD and AS&RD 'A' at the clubhouse. Four Wents on 1st August.

The final was played over the best of three legs, and with AS&RD 'A' winning the first and ADD the second, the stage was set for the thrilling 3rd decisive leg. ADD batted first and scored an impressive 31 runs. AS&RD 'A' followed and batted steadily to level the scores with two wickets standing. Ken Billing, the penultimate player of the innings, hit a potential winning run but was promptly bowled out leaving the scores tied with one wicket remaining. So it was left to last man John Henley to score the run that gave AS&RD 'A' the championship.

In the play-off for third and fourth place AS&RD 'B' beat Accounts 2 : 0.



## AS&RD 'A' Squad

Back row L to R: Ken Billing, Richard Ingleton, Brian Ellender, Peter Bird - Presenter of Trophies, George Oxford, Andy Bush, Dennis Ruddlesden. Front row L to R: Trevor Swift, Sue Taylor, Ron Masters - Captain, John Henley. (Trevor Swift and Sue Taylor did not play in the final.)

## CROSSWORD No. 55



### ACROSS

1. A pretender to the throne, and lean. (4-2-5)
9. What the film industry awards. (5)
10. The strings players do it by plucking. (9)
11. Drinking in small amounts. (4)
12. A sensation of touch. (4)
13. Make hot and dry. (5)
15. Mollusc with arms. (7)
16. A writer of composition. (7)
17. Gathered strip of material, hanging. (7)
20. The end of the call, maybe romance. (4-3)
22. Chief magistrate, Canadian president of Council. (5)
23. His Holiness. (4)
24. A bird of prey of falcons. (4)
26. Ultimate indivisible units of electrical charge. (9)
27. Proclamation maker. (5)
28. Just you, yourself. (5-6)

### DOWN

1. Top prize of lottery. (4-3)
2. A southern airport. (4)
3. Heavily burdened, with tangibles or mental. (7)
4. Small soft-eyed antelope. (7)
5. Not really impressive, of no consequence. (10)
6. Carried by the maid, waitress. (3-4)
7. Console, when distressed. (4-9)
8. Found inside a mollusc shell. (6-2-5)
14. Written, with no particular one in mind. (4-6)
18. Me, or you alone. (7)
19. Heroic or spectacular deed. (7)
20. Counter stroke in fencing. (7)
21. Expression of one's own thought. (7)
25. Arbitration service (unit). (4)

For amusement only

### Solution to Crossword No. 54

#### ACROSS

1. Fat lot of good; 10. Untie; 11. Poison Pen; 12. School Cap; 13. Scene; 14. Rowing; 16. Marmoset; 18. Grimaces; 20. Pug Dog; 23. Amend; 24. Provident; 26. Coastline; 27. Maho; 28. Hard to please.

#### DOWN

2. Aitch; 3. Lie down; 4. Topics; 5. Fair play; 6. Oposum; 7. Depressed; 8. Cursory glance; 9. Investigation; 15. White wash; 17. Set point; 19. Auditor; 21. Utilize; 22. Bo Peep; 25. Exams.

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## CLUB-HOUSE ATTRACTIONS

### CABARET NIGHT

with  
**PROFUSION**  
and Barry Lee Martin's Music  
Friday 7th October 8 - 12.30am

Admission £1.75 Tickets from Graham Bird (ISD) and the Bar

### AUTUMN DANCE

with  
**MESCALERO**  
on Saturday 8th October 8 - 11pm  
Admission 25p

Tickets from Club Bar and at Ballroom Door

### PUB NIGHT

with  
**DAVID FORBES**  
at the **HAMMOND ORGAN**  
on Friday 28th October 8 - 11pm  
Admission free

### CHILDREN'S DISCO

with  
**TIP TOP SOUNDS**  
on Friday 14th October 7-10pm  
Admission: 25p

Tickets at Ballroom Door

### CRICKET CANDLELIGHT DINNER DANCE

with  
**MESCALERO**  
on Friday 21st October  
Admission £5  
Dinner at 8 Dancing 9 - 12.30am

Tickets from Cricket Committee and Bar

### BADMINTON BUFFET DANCE

on Saturday 15th October 7 - 11.45pm  
Admission: £2

Tickets from Club Bar  
Barry Finch - ADD (790) Ian Rose - ATE (2977)

### A.K.K.C.C. EVENING

on Saturday 22nd October  
Presentations 8pm Disco 8.45 - 10.45

Welcome to all Cricketers

### SWIMMING

Swimming baths open to all members Wednesday, Friday, Saturday, Sunday 11.00 - 1.00 and 3.00 - 8.00. Swimming Section Members Monday, Tuesday, Thursday (Details from Section)

### SQUASH

Two squash courts available. Bookings in person only. There is always something attractive for members and their friends and families. Enquiries on Medway 251492 or 250402