

New organisation for the future

The formation of a new company, GEC-MARCONI LTD, was announced at the beginning of July by Lord Weinstock. It is responsible for the supervision and co-ordination of all the management companies previously in the Marconi Group and GEC Avionics.

This has resulted in the departure from Rochester, by promotion onto its Board and management, of some of our most senior and long-standing executives. Bill Alexander, whose name and record are synonymous with the build-up and success of GAv Rochester over some thirty years, has been appointed Deputy

Managing Director of the new company. Peter Hearne, also with a long and distinguished record here, is their Assistant Managing Director, responsible for the activities of GAv Rochester, GEC Sensors Ltd (previously GAv) Basildon, Marconi Communications Systems Ltd and Marconi International Marine Co Ltd. Both these people are Board Members of GEC-Marconi, as is also David Rickard, who is appointed Finance Director. Professor John Shepherd is appointed Research Director, and the expertise of both will be of tremendous value to the new organisation.

Ron Howard is our new Managing Director

Responsibility for all activities here at Rochester, and at Nailsea, plus Mobile Radar and Applied Physics Divisions at Borehamwood and Sonar Systems (previously Special Projects) Division at Welwyn Garden City, now rests with Ron Howard, who has been Managing Director, Dynamics Group since early this year, and has been so closely involved in the years of build-up to our present leadership in a number of

areas especially in Flight Controls Systems.

In his new capacity as our chief executive, Ron Howard is also a Director and Board Member of GEC-Marconi, and is looking forward to a continuing strong association with his former Rochester colleagues.

As we closed for press, Ron Howard announced the first step in his review of the Company structure, with three new groupings of Project Divisions.

David Clews is Assistant Managing Director responsible for **Surveillance and Civil Systems (SCS) Group**, comprising MASD, FCD, AS&RD, RSD, SSD and MRD.

Ray Reese is Assistant Managing Director for **Controls and Instrument Systems (CIS) Group**, comprising CAD, ISD/OPG, PSD and PCSD.

John Spinks is Assistant Managing Director for **Displays and Guidance Systems (DGS) Group**, with ADD, GSD, ATED, and APhD.

A Message from the Managing Director

The new GEC Avionics Limited, with its divisions at Rochester, Nailsea, Borehamwood and Welwyn Garden City, and the formation of GEC-Marconi Ltd are evidence of the thrust in GEC towards meeting the new challenges in world aerospace. Our colleagues Bill Alexander, Peter Hearne, David Rickard and John Shepherd have been promoted into GEC-Marconi, and our congratulations and very best wishes go with them. Here in GAv at Rochester there are still some more developments to be made in our internal management structure and I anticipate these being done in the near future.

We intend to meet the changes in the world of aerospace with the same success that we have achieved in the past. The recent purchase of Lear Siegler in the US is a vigorous move in this direction.

I am confident that the new arrangements will enable us to maintain our world lead in the design, development, and production of advanced systems for customers around the world.

Ron Howard



Major Acquisitions in the USA

As part of its strategy of expanding its presence in the United States aerospace industry, GEC has purchased the California-based Astronics and Developmental Sciences subsidiaries of Lear Siegler Holdings Corp. for US\$205 million.

Astronics and Developmental Sciences are situated in the Los Angeles area, a major centre of the United States aerospace industry. The companies are leaders in the design, development and manufacture of advanced flight control systems and of remotely piloted vehicles.

Their technologies and

products form a natural addition to GEC Avionics' activities. These businesses will have total combined sales of around £450 million (US\$720 million), of which 40 per cent will comprise sales in or to the United States.

"The new acquisition, in conjunction with our existing company in Atlanta, Georgia, will provide us with a very powerful industrial base for expansion in avionics products and systems, not only in the United States but also internationally," says Ron Howard, who adds that the new combination will create the capability to supply the

widest range of advanced avionics equipment in the world.

Combat Aircraft Controls Division and Astronics are already collaborating in connection with the Advanced Tactical Fighter programme for the United States Air Force. Also in the US market are our major production orders for ADD's HUDs and ISD's SCADC - this last will alone account for over 10% of the UK's avionics exports in 1987.

The company is also working in major new technology areas with Boeing on the new passenger aircraft, the 7J7.

GEC Avionics Inc., Atlanta

At the Annual General Meeting of the Board of Directors of GAv Inc., held in Atlanta on July 15, the Directors approved the following appointments:

H D F EAGLES - Chairman of the Board

W M BROYLES - President, Chief Executive Officer

Harry Eagles, well known to many at Rochester from his years in ADD and AS&RD, has been President and CEO in Atlanta for about 8 years.

Bill Broyles has been at the Dayton office for many years, as Manager and more recently as Vice-President, Marketing, USA.

THE NIGHT-ATTACK AV-8B HARRIER 2 FLIES WITH CATS EYES



At the end of June, the McDonnell Douglas/British Aerospace night attack AV-8B, which is destined for the US Marine Corps, made its first flight near St. Louis.

EOSD's fixed forward-looking infra-red (FLIR) sensor is contained in the bulge on the nose; the pilot is wearing ADD's CATS EYES night vision goggles. Testing at

St. Louis will be followed in a few weeks' time by a further evaluation at China Lake, California, and deliveries to the Marine Corps are scheduled for late 1989.

Upstairs Restaurant & Bar Lounge

The competition for a name for the Restaurant attracted 105 entries from 30 people. There was a great variety of suggestions; two in particular, which came up several times with slight variations, were 'Alexanders' and 'The Flight Deck'.

In recognition of many years of personal support of the Club, its new clubhouse, and now of the new facilities, by Bill Alexander, it was finally felt that the name

ALEXANDERS

would be most appropriate. This is especially so now, as a tribute to his many years at Rochester. The Management Committee have accepted this recommendation.

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Phyllis Ellis, CMS

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



Editor's Notice Board

Does any one know who could translate a SWEDISH knitting pattern into ENGLISH?
Phone Enid Dell - Medway 253189

ATLANTA CALLING!

May 15 was a special day for GEC Avionics Inc. Captain Joe Bulmer of the US Air Force Thunderbirds toured our Atlanta facility and spoke with employees before their airshow appearance at nearby Dobbins Air Force Base. Accompanying Captain Bulmer were two of the team's avionics technicians, S.Sgt. Paul Duncan and Sgt. Mark Estes.

They visited our F-16 production area and could see first hand our commitment to the Head-Up Display - such an integral part of the aircraft they fly in their dazzling shows.

Being proudly displayed at our offices is a photograph of the planes in formation signed by all the Thunderbird pilots. A proud day for all of us at Atlanta!



USAF Technicians Paul Duncan and Mark Estes, Capt. Bulmer, as well as Bill Finch, Vice President Operations, look on as Ron Bell demonstrates the MonoHud system.



GEC Avionics Inc. President Harry Eagles receives photograph from Thunderbirds Capt. Joe Bulmer. Also pictured are technicians Paul Duncan and Mark Estes.

MAJOR CONTRACT FOR UPDATING ROYAL NAVY HELICOPTERS

MASD has won a contract to update the sonar system in the Royal Navy's fleet of Sea King Mk5 Antisubmarine (ASW) helicopters. The contract, including the supply of new sonar systems, could be worth as much as £43 million.

The update will improve the operational and submarine detection capabilities of the helicopter, increase its efficiency and reduce sonar operators' workload, by permitting more efficient manipulation and display of information.

The enhanced system, AQS-902G-DS, will process information received both from free sonobuoys and a dipping sonar, presenting integrated information on a Cathode Ray Tube (CRT) display.

MASD will modify 112 AQS-902C systems to AQS-902G-DS standard, and supply an additional 31 AQS-902G-DS to the Royal Navy.

At present, the Sea King is fitted with two "stand alone" systems, the Plessey 195 dipping sonar system and the AQS-902C sonobuoy processing system. The latter was developed and manufactured by GEC Avionics, and has proved highly successful during several years of operational service. A particular feature of the update is the replacement of the original analogue computing section of the Plessey 195 with the digital processing of the AQS-902 system.

AQS-902 systems are fitted in numerous anti-submarine aircraft and helicopters worldwide, and have been fully proven in Royal Navy service since 1980, in the Sea King Mk 5. Over 150 such systems have been delivered and a further 75 are on order in addition to the contract described above.

CENTRAL CHARITY FUND

Eunice McMillan, Welfare Officer says: "On Saturday 16 May I had the pleasure of attending the May Fayre at Mote House Cheshire Home, Maidstone, in order to present a cheque for £100 on behalf of the Central Charity Fund. The cheque was received by Kevin Loneragan, a resident of the Home."

"The May Fayre, an annual event, is the main fund raising event of the Home, and this year the proceeds were being directed towards the provision of an extension to their existing Craft Centre."

"I was given a guided tour of the Home and

grounds and was able to talk with residents and staff who all expressed their thanks to the contributors of the Central Charity Fund."

In a letter of thanks from the Leonard Cheshire Foundation, addressed to company Management, Mr. A.L. Lowton, Head of Home at Mote House, says that they hope to have the extension in use by December. With added space and increased facilities they will be able to offer additional places for disabled day visitors from the Maidstone area, all of whom will benefit from the opportunity for useful and gainful activities offered at Mote House.



The Royal Aeronautical Society

Medway Branch

Aircraft Preservation Group

SPECIAL FILM EVENT

Wednesday, 16th September, 1987

A Special Presentation of archive Aviation Films is to be shown by Jim Ashton (Curator of Audio and Visual Studies, RAF Museum, Hendon) commencing at 7.30 p.m. Wednesday, 16th September, 1987, in the GEC Avionics Main Canteen.

Members, Guests and Friends are all very welcome. Programmes (50p) will be available before and on the evening. Proceeds will go towards the restoration of two Hurricanes and other aircraft at present being rebuilt in the Preservation Group's Workshops at Rochester Airport.

Shades of Clochemerle

On 6 July a major social event took place in MASD when Laurie Hampson, Divisional Manager and John White, Administration Officer, performed the formal opening ceremony at the Division's newest facility.

This somewhat radical refurbishment of the old Divisional Manager's office has, in the interests of higher productivity, increased the functional capacity of this particular installation by a significant amount, viz

Standing	+130%
Sitting	+175%
Washing	+150%

After a short but moving ceremony the cross-legged queue of men anxious to try out the new offices was permitted to enter the marble halls, emerging shortly thereafter flushed with success.

The next phase in the continuing refurbishment of MASD's vital amenities will be the provision of a similar (but not identical) update of the distaff side of this particular installation. Hang on - Ladies!



LOST ISLAND

The birds of GEC Rochester deplore the destruction of the traffic island near the Phase III building. This has been an oasis in a desert of concrete and cars for the past few years, trees had been planted on it, and on sunny days in the summer (few it is true), between 12 p.m. and 1.30 p.m. featherless birds of every kind, Tower birds, Portacabin birds, Hangar birds, Phase III birds to name a few could be seen to alight and rest, for between half an hour to an hour during feeding time, surely this tiny haven could have been left for the enjoyment of many. Not destroyed or vandalised for the use of a few. Bird watchers have now been deprived of what little pleasure during a break from what has now become for many, unfortunately, a claustrophobic working day.

PARIS '87

The company's presence at the Paris Air Show in June was as part of the national exhibit of the Society of British Aerospace Companies (SBAC).

It was the occasion for the announcement of Flight Control Division's major order for the fly-by-light control system for the US Navy's new airship, a 400-foot non-rigid giant to be built by a consortium of Airship Industries Inc. and Westinghouse. The airship will be developed as an airborne early warning platform for the USN.

FCD has been working on this project since 1985, and will be subcontractors to AI; the system follows that pioneered by the system already supplied for AI's Skyship 600, and incorporates work done by Flight Automation Research Laboratory. With initial production options, the order is valued at \$6 million.

Also featured impressively at Paris was the EAP technology

demonstrator aircraft, which flew publicly for the first time at Farnborough last year. Since then, CACD's fly-by-wire flight control system has been thoroughly proven, and enhancements to the computer software ensured a highly agile and demanding aerobatic display.

Other systems featured by GAV were - Total Terrain Avionics (TAA); our total capability Flight Control systems; Communication and Navigation Systems; Night Vision systems including HUDs, 'head down' tactile displays and Night Vision Goggles. The Emerald radar proposed for the European Fighter Aircraft - for which EAP is the demonstrator - was also on show.

The company's pre-eminence in the design and supply of avionic systems of all types was amply shown to important guests and experts from the world's aerospace industry.

"Voyez, c'est comme ceci, Monsieur le President."

At the official opening of the Paris Air Show the President of France, Monsieur François Mitterand, visited two British stands, those of the British National Space Centre and GEC Avionics.

Malcolm Moulton, Company Information Executive, explained the company's participation in the European Airbus programme and in HERMES, the European space shuttle project.

In the foreground of the picture can be seen part of the large model on the GEC Avionics Stand of the European Fighter Aircraft.



The GEC Avionics National Gliding Championships

20 - 28 June 1987



The Open Class National Championships at Lasham this year were badly hindered by June's appalling weather, and it was only possible for flying to take place on four of the nine planned

days. Disappointing since even the fine weather early on the opening day did not hold. Nevertheless a clear winner at the end of the event was Ralph Jones in a Nimbus 3 glider - his third win in this

prestigious event.

The picture shows Ralph Jones (l) receiving the winner's trophy from Dr. Geoffrey Pope, Director Royal Aircraft Establishment.

YET ANOTHER MAJOR COMPUTER EXPORT FOR GEC AVIONICS

Air Data Computer orders from USA reach \$135 million, as deliveries top 100 per month

GEC Avionics has now received orders totalling \$135 million from the United States Air Force, for production of Standard Central Air Data Computers (SCADC). A third order, worth \$35 million, has now been placed for this new range of aircraft computers, which are designed for re-equipping 39 different types of aircraft operated by the US Navy and US Air Force.

GEC Avionics has received all three of the production orders so far placed for SCADC. Instrument Systems Division began producing in late 1985 and is

currently delivering units at a rate well exceeding 100 per month, a record for such equipment.

"This programme, which alone accounts for 11% of all UK exports of aviation electronics, has created over 2,400 jobs for ourselves and our 80 UK subcontractors" says Ron Howard, Managing Director.

"The performance and reliability of these computers in service is already proving the wisdom of the US Air Force and US Navy decision to standardise with a range of latest technology air data computers. We are proud to

be chosen to supply them, for aircraft ranging from the A-4 Skyhawk to the C-5 Galaxy."

ISD is employing the latest production techniques in achieving these high delivery rates, including the use of ATED's commercially-developed ORION automatic test equipment.

Aircraft on which SCADC units are being installed include the General Dynamics F-111, Grumman C-2, E-2 and A-6, Lockheed C-141 and C-5, McDonnell Douglas A-4 and F-4 and the Vought A-7, together with their variants.

Another 1st for PCSD (well 1000th actually)

Wednesday June 4th 1987 is a day that Power Conversion Systems Division will remember with both pride and a certain amount of relief, for it was that day which marked the delivery of the 1000th SCADC power supply to Instrument Systems Division.

The occasion was marked in a gesture of congratulations and encouragement when Fred Mackley, Divisional Manager of ISD, along with a number of his colleagues, arrived at PCSD on Tuesday night and

rapidly transformed the main Nailsea Conference Room into an exhibition centre and audio visual theatre. During the day PCSD staff were treated to a splendidly presented audio visual show highlighting the many milestones achieved during the SCADC programme to date. The proceedings were concluded with Fred Mackley congratulating the Division on its achievements and looking forward to many many more power supplies for this most important programme.



Fred Mackley congratulating Howard Jones, Divisional Manager of PCSD

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24th GEC Avionics SPORTS DAY

Deansgate, Saturday 11 July

The newly refurbished Deansgate track was once again the venue for some tough competition between individual athletes, and their divisions. A fine day added to their enjoyment and that of the spectators.



Steve Small
(FARL) 3rd
at 23.48.



Mens 1500m
Malcolm Martin (CMS) leads from Graeme Saker (AS&RD) (Hidden - he's the spare foot), Richard Leonard (Guest) and Steven Fury (AS&RD). Saker won in an outstanding 3:54.2 from Fury and Leonard.



Richard Hale (FCD) wins 100m Heat.

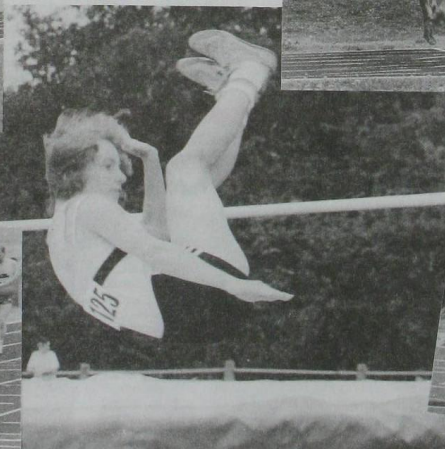


Mark Chapman (ADD) Javelin Winner. He also won Discus and was only narrowly beaten for Victor Ludorum.



Above:
Jenny Nightingale (FCD) Long Jump
Winner at 4.35m.

Below:
Julie Watson (ADD) 3rd at 1.2m.

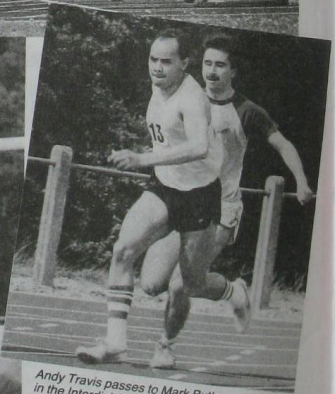
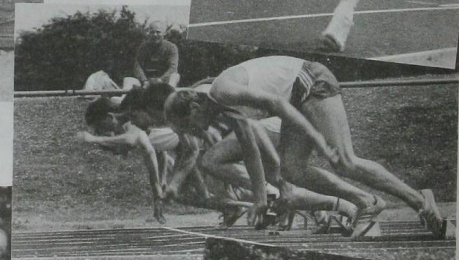


Len Murphy's lost his shoes. But he still did 4x 100 Relay.



Right:
Graeme Saker
(AS&RD), GEC AC top
Middle Distance
Runner, also Kent
Champion at this
distance.

Below:
Start of Mens 100m
Final. Dave Dickson
(FARL) nearest
camera.



Andy Travis passes to Mark Butler in the Interdivisional Relay. Their team, FCD, was 3rd.

Photographs
by Ian Douglas

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Prizegiving by Mrs. E. Alexander



Two Brissenden sisters, Pat and Sue.



Karen Gordon (ADD) with Master-of-Ceremonies Jim Collins.



Edwin Cheetham (FARL) Mens Veteran Winner.

FARL'S MANAGEMENT TROPHY TEAM

Back Row L to R: Simon Cheetham, Dick Collinson (DM), Phil Breakwell, Steve Small, John Brennan, Paul Wallace, Pete Holland.

Centre Row L to R: Stephen Cheetham, Terry Leftley, Sally Leftly, Muriel Cheetham, Robin Davies (Capt), Richard Potts.

Front Row L to R: Edwin Cheetham, Jane Daragon, Gabrielle Liddy, Pete Girow, Dave Dickson, Colin Utting.

also part of FARL Team but absent from Group Photo: Claire Thomson, Julie Mitchell, Keith Mitchell, Jim Pickford, Jane Holdbrook.



Photographer: Paul Buckingham, FARL.

The Results

Men

100 metres	sec
1 D. Cooper (GAV)	11.1
2 R. Hudson (ATED)	11.6
3 M. Butler (FCD)	11.7
4 I. Gower (ISD)	11.7
5 D. Dickson (FARL)	12.0
6 C. Rossiter (MASD)	12.2

200 metres	sec
1 R. Hudson (ATED)	23.2
2 M. Butler (FCD)	23.5
3 I. Gower (ISD)	24.0
4 D. Dickson (FARL)	24.4
5 G. Saker (AS&RD)	24.7
6 R. Davies (FARL)	25.7

400 metres	sec
1 R. Hudson (ATED)	50.3
2 M. Butler (FCD)	51.3
3 S. A. Cheetham (FARL)	52.7
4 D. Dickson (FARL)	52.7
5 P. Trickett (ATED)	55.0
6 R. Potts (FARL)	65.2

800 metres	min/sec
1 J. Roots (GSD)	2:00.3
2 S. Furry (AS&RD)	2:01.8
3 R. Smith (GAV)	2:02.5
4 M. Martin (CMS)	2:04.3
5 D. Jones (Guest)	2:06.3
6 S. Allen (CADC)	2:07.2
7 N. Mason (GAV)	2:08.1
8 J. Rennie (Guest)	2:08.7
9 S. A. Cheetham (FARL)	2:10.8
10 I. Broad (ATED)	2:14.7
11 E. Broad (ATED)	2:17.2
12 S. R. Cheetham (FARL)	2:19.5
13 M. Bloore (ADD)	2:24.6
14 J. Evans (ATED)	(no time)

1500 metre	min/sec
1 G. Saker (AS&RD)	3:54.2
2 S. Furry (AS&RD)	4:01.9
3 R. Leonard (Guest)	4:05.1
4 J. Roots (GSD)	4:15.7
5 J. Rennie (Guest)	4:16.7
6 D. Jones (Guest)	4:17.6
7 D. Williams (MASD)	4:19.9
8 A. Jones (Guest)	4:21.8
9 A. Whiteman (CMS)	4:37.9
10 S. R. Cheetham (FARL)	4:39.1
11 M. Bloore (ADD)	4:52.5
12 P. Tattersall (FCD)	5:06.3
13 D. De Winton (MASD)	5:09.4
14 T. Leftley (FARL)	5:14.3

1500 metre	min/sec
1 T. Hayes (ISD)	7:12.0
2 E. Broad (ATED)	8:16.6
3 S. R. Cheetham (FARL)	8:20.6
4 P. Tattersall (FCD)	9:04.2
5 M. Jury (ISD)	9:10.8
6 C. Utting (FARL)	9:34.8
7 R. Potts (FARL)	9:45.2
8 P. Carrington (MASD)	9:48.0
9 G. Cheetham (FARL)	9:49.7
10 B. Hall (FCD)	9:50.0
11 J. Brennan (FARL)	10:48.9
12 P. Breakwell (FARL)	10:48.9

1500 metre	min/sec
1 K. Gordon (ADD)	2:24.4
2 C. Adams (MASD)	2:30.3
3 J. Watson (ADD)	2:31.1
4 E. Preston (AS&RD)	2:32.3
5 S. Sutton (COD)	2:35.0
6 S. Pentecost (ADD)	2:41.6
7 K. Harris (AS&RD)	2:43.7
8 J. Daragon (FARL)	3:13.9

4 x 100 metres	sec
1 ADD	57.7
2 FCD	58.4
3 FARL	67.1

High Jump	metres
1 P. Chapman (ADD)	1.90
2 S. Crosher (GAV)	1.60
3 M. Hitchmough (MASD)	1.55
4 P. Barnicot (MASD)	1.50
5 R. Davies (FARL)	1.50
6 M. Chapman (ADD)	1.50

Long Jump	metres
1 G. Gallagher (ADD)	6.21
2 R. Hudson (ATED)	5.79
3 R. Hale (FCD)	5.42
4 S. Small (FARL)	5.30
5 M. Chapman (ADD)	5.30
6 R. Davies (FARL)	5.21

Shot	metres
1 G. Gallagher (ADD)	10.15
2 M. Chapman (ADD)	10.07
3 G. Cawte (FCD)	8.67
4 M. Hitchmough (MASD)	8.31
5 S. Small (FARL)	8.28
6 P. Girow (FARL)	8.08

Discus	metres
1 M. Chapman (ADD)	29.92
2 G. Gallagher (ADD)	24.60
3 S. Small (FARL)	23.48
4 P. Barnicot (MASD)	21.92
5 R. Hale (FCD)	21.82
6 P. Girow (FARL)	16.36

Javelin	metres
1 M. Chapman (ADD)	50.84
2 P. Wallace (FARL)	42.00
3 C. Rossiter (MASD)	36.82
4 S. Small (FARL)	36.44
5 G. Gallagher (ADD)	31.12
6 T. Leftley (FARL)	27.36

4 x 100 metres

Relay	sec
1 FARL A	47.4
2 ATED	48.5
3 FCD	49.4
4 MASD	51.5
5 FARL B	53.3

High Jump	metres
1 P. Chapman (ADD)	1.90
2 S. Crosher (GAV)	1.60
3 M. Hitchmough (MASD)	1.55
4 P. Barnicot (MASD)	1.50
5 R. Davies (FARL)	1.50
6 M. Chapman (ADD)	1.50

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1 G. Gallagher (ADD)	6.21
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5 G. Gallagher (ADD)	31.12
6 T. Leftley (FARL)	27.36

Colts	100 metres
1 P. Sythe (Guest)	13.1
2 A. Letchford (Guest)	13.4
3 R. Kidd (Guest)	13.4
4 R. Porter (Guest)	13.4
5 M. Missions (Guest)	13.8

100 metres	sec
1 K. Newton (FCD)	14.1
2 S. Brissenden (GAV)	14.2
3 C. Adams (MASD)	14.5
4 J. Nightingale (FCD)	14.8
5 G. Evans (ATED)	15.3
6 S. Gower (ISD)	16.1

800 metres	min/secs
1 K. Gordon (ADD)	2:24.4
2 C. Adams (MASD)	2:30.3
3 J. Watson (ADD)	2:31.1
4 E. Preston (AS&RD)	2:32.3
5 S. Sutton (COD)	2:35.0
6 S. Pentecost (ADD)	2:41.6
7 K. Harris (AS&RD)	2:43.7
8 J. Daragon (FARL)	3:13.9

4 x 100 metres	sec
1 ADD	57.7
2 FCD	58.4
3 FARL	67.1

High Jump	metres
1 K. Newton (FCD)	1.25
2 S. Brissenden (GAV)	1.20
3 J. Watson (ADD)	1.20
4 S. Sutton (COD)	1.20

Long Jump	metres
1 J. Nightingale (FCD)	4.35
2 K. Newton (FCD)	4.20
3 S. Brissenden (GAV)	4.18
4 E. Harris (ISD)	4.00
5 P. Brissenden (GAV)	3.89
6 G. Evans ATED	3.72

Shot	metres
1 S. Brissenden (GAV)	8.64
2 E. Evans (Guest)	7.53
3 P. Brissenden (GAV)	7.32
4 E. Harris (ISD)	7.15
5 G. Liddy (FARL)	6.38
6 G. Evans (ATED)	6.29
7 R. Spinks (GAV)	6.06

Discus	metres
1 E. Harris (ISD)	21.88
2 S. Brissenden (GAV)	20.02
3 E. Evans (ATED)	18.24
4 P. Brissenden (GAV)	15.64
5 R. Spinks (GAV)	15.02
6 G. Liddy (FARL)	13.60

Javelin	metres
1 S. Nash (ISD)	19.52
2 S. Brissenden (GAV)	19.34
3 P. Brissenden (GAV)	18.08
4 J. Nightingale (FCD)	13.12
5 E. Evans (ATED)	12.04
6 K. Newton (FCD)	11.64

100 metres	sec
1 C. Adams (MASD)	14.5
2 J. Watson (ADD)	14.7
3 R. Spinks (GAV)	14.7

Veterans Handicaps	sec
1 G. Cheetham (FARL)	11.5
2 G. Joyce (CADC)	11.9
3 E. Broad (ATED)	13.2
4 J. Pickford (FARL)	13.2
5 P. Carrington (FARL)	13.3
6 R. Collinson (FARL)	13.6

100 metres

100 metres	sec
1 P. Ingrams (ADD)	16.7
2 M. Cheetham (FARL)	19.0
3 J. Mitchell (FARL)	23.5

100 metres	sec
1 P. Ingrams (ADD)	16.7
2 M. Cheetham (FARL)	19.0
3 J. Mitchell (FARL)	23.5

100 metres	sec
1 P. Ingrams (ADD)	16.7
2 M. Cheetham (FARL)	19.0
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100 metres	sec
1 P. Ingrams (ADD)	16.7
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100 metres	sec
1 P. Ingrams (ADD)	16.7
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3 J. Mitchell (FARL)	23.5

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3 J. Mitchell (FARL)	23.5

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3 J. Mitchell (FARL)	23.5

100 metres	sec
1 P. Ingrams (ADD)	16.7
2 M. Cheetham (FARL)	19.0
3 J. Mitchell (FARL)	23.5



Victor Ludorum - Ross Hudson of ATED.

HASKETT TROPHY



HASKETT PRIZEWINNERS
John Little and Keith Norton from Basildon, Mrs. Sarah Haskett, and Adrian Taylor and Tony Fordham

The Tenth Haskett Trophy award was presented to two teams this year. Mrs. Sarah Haskett, now Deputy Mayor of Maidstone, who is the widow of Fred Haskett in the memory of whose long service with the company the award is made, was the guest of honour at a ceremony in the Conference Suite, when she handed over the awards.

Opening the proceedings, attended by representatives from each Division's Management and young engineers, Dr. Bernard O'Kane commented how difficult the adjudication had been, with 11 entries this year.

The team of assessors considered Innovation, Value to the Company, Team effort, and Presentation. Next, Prof. John Shepherd said how 10 years of the competition had seen enormous changes in the technology.

"Innovation, and the exploitation of it for the company's success, is alive and well in GEC Avionics." It is the essence of the Haskett Trophy that the value to the company of each entry is assessed and this year's large entry, from all GAV establishments, gave a large task of judging. Prof. Shepherd went on to outline all the entries, and then

announced the winners.

These were: "Automated Powerplant Testing Unit" by Tony Fordham, Project Leader, and Adrian Taylor, Senior Software Engineer, of Powerplant Systems Division; and "AD3500 Communications System" by Keith Norton and John Little, both Principal Technologists, of Airadio Products Division, Basildon (now GEC Sensors Ltd).

These entries were both judged to be of such outstanding merit that two first prizes of £1200 were awarded.

Also this year, an award of £500 was made to the outstanding runner-up, David Puleston, Development Engineer of Airborne Display Division, for his entry "New Displays for T4A - Total Terrain Avionics".

To sum up the occasion, Mrs. Haskett thanked the company for again asking her to an occasion which gave her so much pleasure, and offered her congratulations to all the winners and other entrants.

Tony Fordham presented her with a bouquet and thanked the judging panel for all their efforts, the company for organising the competition, and Mrs. Haskett for her support.

The Adjudicating Panel

Dr. Bernard O'Kane, Consultant to the Board; Prof. John Shepherd, Technical Director at the time of judging; Paul Rayner, Managing Director, GEC Computers Ltd; Peter Smith, Marketing Liaison Engineer; and Geoff Howell, Director of Research, Civil Aviation Authority.

THE REST OF THE ENTRIES FOR THE HASKETT TROPHY

An Automated Electromagnetic Compatibility Production Test System

Steve Fisher	Project Leader, Tornado	CACD
Don Lawrence	Project Leader, Tornado	
Bruce Readhead	Project Engineer, Tornado	
Adrian Simmonds	Development Engineer	

Development of Nuclear Protection Device

Clive Goodchild	Project Leader	FARL
David Lerner	Senior Development Engineer	

Off-Axis Holographic HUD Design

Dr. David Hubbard	Senior Systems Engineer (Optical Design)	FARL
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Advanced Ground Station

Tim Smith	Project Leader, AGS	FCD
Neil Watt	Project Engineer	
Paul Hemphshall	Development Engineer	

Application of ADA in a Real Time Flightworthy System

Peter Lowrie	Software Group Leader	ISD
Mark Gamm	Senior Software Engineer	
Graham Wade	Senior Software Engineer	
Ian Sparks	Senior Software Engineer	

Improved Mission Survivability with LCD Reversionary Instruments

Trevor Spearpoint	Project Leader	PSD
Melvyn Jones	Development Engineer	
Tom Rogers	Development Engineer	

A Vehicle Correlator for the Nimrod AEW Radar

Mr. N. Duff	Project Leader	Borehamwood
Ms. D. Little	Senior Engineer	
Mr. W. Strawhorne	Senior Engineer	

Innovative Tooling Method Aids AEW Nimrod

Mr. D. Francis	Senior Development Engineer	Radlett
Mr. J. Hancock	Development Engineer	
Mr. A. Smith	Quality Engineer	

AUTOMATE POWERPLANT TEST UNIT

Ground testing of aircraft jet engines can be a long and fuel wasting process as it involves actual performance and setting up the controls. Automation has been introduced to test operator to reduce test time and fuel use.

Powerplant Systems Division's new Powerplant Test Unit acquires all the data from turbine engines, and in combination with prompts the operator through the test sequences and indicates the engine status in real time display of measured and calculated parameters. Test data is automatically stored and analysed to produce a certificate printed, and the results logged. Tests twelve engine types including turbojet, turbofan and turbojet, and a turbojet.

The unit has been selected by the Royal Saudi Air Force and the United States Air Force. It is being supplied complete with test cells developed by the Division.

PRESENTATIONS

AD3500 COMMUNICATION SYSTEM

be a lengthy measuring plex engine to assist the sage Automated to test gas a processor mplex test e through a calculated mpled, the test d. The unit helicopter, automatically

al Air Force, d States Air test software

AD3500 COMMUNICATION SYSTEM

Airadio Products Division at Basildon designed the AD3500 Communications System for the new Harrier GR Mk5, soon to enter service with the RAF.

AD3500 is a VHF/UHF Airborne Communications Transceiver which embodies many innovative features and is fitted with an Electronic Counter Counter Measures system that provides an Anti-Jam capability through frequency hopping.

To win the contract the equipment had to be designed from concept to delivery for evaluation and flight trials in six months.

As a result of successful evaluation and flight trials the Division has an initial order for £2.8M, with healthy overseas sales interest.

members' participation in the GAv Flying Scheme.

The winning Automated Powerplant Test Unit entry showed the contrast between innovation and inspiration. The APTU is a result of careful market analysis, a hard won practical background and an effective engineering implementation. These ingredients are combined into a unit which matches the market need for the accurate collection of measurements made by transducers mounted on aero gas turbine engines.

The APTU forms part of a system connected to the engine which takes the measured values, computes the complex calculations which fully define each engine's actual performance, and if the engine is outside limits either indicates the adjustments to be made or the engine component which is not performing to the required efficiency. As the engine is vital to the aircraft's operation, the system is designed to ensure the thoroughness of each test.

This is achieved by ensuring test repeatability, by optimising the test sequence, by cueing the operator through the exacting test schedules and providing him with on-line engine status indication. The objective of the APTU design was to apply the latest technology and the hard-earned experience from previous contracts to produce a unit which would open up a wide market for GEC Avionics. The effective implementation is due to the technical capabilities and practical experience of the team. Tony Fordham and Adrian Taylor have been fully involved in previous contracts where systems have been developed for the Adour engine in Jaguar, the Rolls-Royce RB199 engine in Tornado and the General Electric F404 engine in the Canadian F-18. They were familiar with the techniques of engine testing,

the environment in which the equipment exists and the needs of the operators.

With trips to sites in such places as Cold Lake, Canada, where the temperature on a better day gets to -40°C, Tony Fordham became the holder of the Division's 'Uncomfortable Flying' Endurance record. He experienced flights in both directions across the Atlantic in the Canadian Forces Transport, fondly known as 'White Knuckle Airlines'. In an evening over a pint in the Alexandra, Tony can provide vivid descriptions of the RB199 in surge (earthquaking bangs and flames emerging from front and back) and of close range acquaintance with tethered F-18s, in reheat, pawing on its undercarriage like a bull about to charge. The benefit of an effective EMC plan was clearly appreciated as aircraft were tested with weaponry fitted.

Tony joined PSD in 1978 with an honours degree in Electrical and Electronic Engineering from Bristol University having sampled the life in the Division as a vacation student during the previous summer.

Adrian Taylor joined PSD in 1977 as one of the first Trainee Computer Programmers, went through to gain his qualifications, develop an expertise in programming, and a good understanding of engineering. Adrian is the Division's holder of the 'Walk on Water' award. This recognises his feats whilst being the front man on an extended visit to Baden, when the Canadians were wrestled to a standstill over calibration technique. He can be persuaded to relate some of his site experiences, of which his plan that enabled him to carry out a rescue from an Indian Reservation shows his ability to manage successfully in a crisis.

The 'Alexandra Principles' are believed to point to the

winning potential of the 'Value to the Company' criteria. To date 236 APTUs have been ordered by the Royal Air Force, Royal Saudi Air Force and the United States Air Force, showing considerable potential business for the Division over the next ten years. The order from the USAF involves retrofitting their manual Engine Test facilities with APTUs and computer software. This order covers hardware and test software for eleven engine types with a total of thirty-three variants, to be installed on bases between Turkey and points eastward to Japan.

The development and manufacture of the APTU has been a fast moving programme. From the initial definition less than two years ago, the equipment was demonstrated at RAF Coltishall last year and this year production units have been delivered to sites in the UK and USA. The rapidity of the development and manufacture is a tribute to the careful engineering design and the skills and effort in the Production Department. The resettlement of most of the Production Department in Hut 11 is the beginning of the gearing up to produce units on schedule and with the demonstrated reliability necessary to keep the Air Forces flying from the widely scattered and remote bases.

It is understood that the 'Alexandra Principles' define the levels of effort required and the techniques, both written and verbal, for the presentation of the project. Both the PSD teams are known to have put considerable effort into their project. Long evening hours were spent in preparing and rehearsing the presentations. Your GAv News reporter can confirm the value of this effort from the many complimentary comments made by the Panel on the clarity of the presentation and the depth of knowledge shown during cross examination.

It was after the award ceremony when your reporter overheard the location of the campaign headquarters. Sneaking past the guards into the darkened upstairs room, there in the grate were the dying embers of the secret plans. Carefully picking amongst the charred computer print out, enough remnants could be put together to read the words... 'The Haskett ... Alexandra Principle consists ... 98 independent ... rules ... select teams ... select excellent projects ... PSD are Champions.' Slipping out of the Alexandra, I reviewed the secrets revealed and reflected, 'Well done, PSD, your Team's won the Haskett!'

Clark Kent

(Alexandra? It's the one just by Chatham Station bus park. Ed.)

POWERPLANT SYSTEMS DIVISION TEAM WINS "THE HASKETT"

At the ceremony on July 8, Mrs. Sarah Haskett presented Tony Fordham and Adrian Taylor with the 'Haskett Trophy' for their entry, the Automated Powerplant Test Unit.

Powerplant Systems Division had an early association with the Haskett Trophy. Frank Wooler, Chief Designer, was one of the contributors to the team which designed and manufactured the Trophy. On the tenth year of its award, Powerplant Systems Division decided the time had come to match his efforts with a winning association. In pursuit of equal opportunities for all, your GAv News reporter penetrated the closely guarded campaign headquarters and can now reveal some of the secrets of the award winning strategy.

It all began explosively. As soon as the request for entries reached Chestfield, from the sandstorm in

the middle of a bunker, loud noises were heard and recorded. Using the special New Road decode equipment, these recordings were deciphered into 'The Haskett, now come on you fellows, we need to challenge, we need a strategy!' and a campaign was Chris-tened.

Long evenings in campaign headquarters developed the 'Alexandra Principles', the unique method for analysing and identifying a winning mission plan. First, the previous years' entries were analysed. Using weighted means, the high success rate formula was developed. The venue, New Road, was statistically significant, the need to field two teams was identified, the agility of two-person teams was recognised as was the stamina and backing of larger teams. Secondly, the judging panel profile indicated optimum target ranging would be achieved by a powerful entry around Liquid Crystal 'Reversionary Displays', by Trevor Spearpoint, Tom Rogers and Melvyn Jones, and the contrasting, equally powerful and winning entry on 'The Automated Powerplant Test Unit' by Tony Fordham and Adrian Taylor.

The Liquid Crystal Reversionary Display entry showed an innovative use of the emergent liquid crystal technology to replace existing, largely electro-mechanical standby instruments. These instruments provide the pilot with an independent source of essential flying, engine and fuel data. The benefits

that LCDs provide enable the positioning of the Reversionary displays within the pilot's normal cone of vision, making the displays easier to see and improving the pilot's assimilation of this independent information. Coupled with the application of the new technology was the deep understanding of the operating requirements for a display whose functioning is essential when the aircraft is suffering from some malfunction. These needs are built into the redundancy and channel separation aspects of the Reversionary Display design. The 'Alexandra Principle' rated highly the quality of practical experience brought to the design as a result of the three team



Adrian Taylor and Tony Fordham show some of the 'internal economy' of the APTU.

Wednesday 8th July saw the 8th running of the ADD Bike Race. Known as the "Tour de Medway", its popularity is increasing with enquiries coming from cyclists in other divisions regarding entry as guests. The organisers declare the event and a maximum number of participants to the traffic division of the Kent Police. So as not to introduce an extra burden to the timekeepers or infringe our statement to the police, no riders from outside ADD have recently been accepted. The organisers apologise for this fact but cannot change their policy.

This year, 29 entries were received, one of which was a tandem which would be allowed to start but would not be eligible for prizes. The field also appeared to be very strong with a clear favourite to win, this was Medway Velo rider Derek Stone of whom it was felt, he only had to ride to win.

The tandem was the first to start, George Cooke and Mark Tickner came early to the line and looked very confident wearing floral sun hats and head scarves. In perfect conditions the countdown began and off pedalled the intrepid pair into the forthcoming sunset.

There were many new faces in the field which included a particularly strong team from the Software department. Among the early starters were Linda Mose, the only lady on the list. The faster riders were seeded to start amongst the last and the first of these to go was Derek Avery. He had rejected his 1987 model bicycle in favour of his 1986 low profile machine. It has been calculated that pound for pound it is worth more than an F16. Next to go was Jim Beane who for so long had set the standard for the event. He was followed by Gordon Lees who, by those in the know, was thought could be very fast. Last man off was odds-on favourite Derek Stone.

By now the early starters had arrived at the finish. First home was the tandem with its occupants looking remarkably fresh considering the extremely good time recorded by the timekeepers. It was a while after that before the solos began.

to arrive, with the early starting software men all producing good rides. It was probably about then that Geoff Dias arrived at the start line. He had just arrived home from holiday before rushing off to take part in the race. The starter had been long gone but Geoff decided to race around the course. Much to his chagrin he punctured when just through Borstal and had to walk a shortcut to the finish.

The well-known course which results in the ascent of the feared Col du Bluebell was in a favourable mood with a slight breeze assisting the riders all the way from the turnoff at Borstal to the turn up to the Lower Bell. Here however a few of the lesser mortals still found it necessary to get off and push, while others were trying to put their derailleurs into their spokes in search for a lower gear. On the hill Jim Beane had Derek Avery in his sights but was obviously not quite going to catch him. Gordon Lees was flying around the course followed shortly after by Derek Stone; it was obvious some very fast times were being recorded.

Later, in the gardens of the Robin Hood, the presentation of prizes was made by our old friend Dave Marvell the former Superintendent of ADD Model Shop and the man whose name the "Tour de Medway" trophy bears. All the riders were presented with a prize when the results were read out in reverse order, but first announced was the performance of the pair on the tandem. Everybody marvelled when George and Mark were attributed with a time of 26.30 as

they seemed to have achieved the impossible on so little training. John Seabrook did a good ride for 14th position in a time of 33.07 beating his previous best by 2 seconds. He was however disappointed with the time because he was held up by traffic in a couple of places and should have been faster. Steve Coates was also disappointed, he punctured halfway up Bluebell and rode the rest of the way to the finish on a flat back tyre.

All the top ten received medals, John Crennell was really lucky, he only beat Mike Blore by one second for 10th place. The Softies had four riders in the top ten but could not quite make the first three, with Rob Andrews 5th and Andy Walter 4th nearly a minute faster in 28.22. In third position was Jim Beane with a time of 28.10. Along with several others that went on the trip, he said he was still tired from touring around France only two days before. On such a good night

he said he should have been capable of a short 27 but confessed he would not have got near the first two. Gordon Lees's introduction to the race could not have been more remarkable. He had only brought his bike from home two weeks before the race after a long lay off. He stormed around the course and only just failed to catch Jim Beane for 2 minutes. His time for second place was 26.12 which beat the previous course record. This was to stand for just less than 2 minutes because Derek Stone came across the line with a time of 25.51. This was a winning margin of just 21 seconds which must have surprised even him. Derek is a good competitive racing cyclist and it would have been quite inexcusable if he had not won the race.

Now that the race was over and the pain of climbing the hill no more than a bad memory, the organisers thanked the competitors for taking part and hoped that they

could look back upon it with some enjoyment. Special thanks were given to the timekeepers Dave and Joyce Marvell, Colin and Diane Bennett, to Sheila Ward for providing each rider with a much appreciated drink at the end of the race; to marshals Chris Dardry, Kevan Duhig, Martin Davies, Jim Hamblett, John and Jean Stewart and last but not least all the spectators who helped to make the event as successful as it was.

Finally the story doesn't quite end there. A few days later, evidence was emerging that all in the Bike Race was not as it should have been. A sharp eyed official who for fear of retribution will remain anonymous had come by photographic evidence to show that the tandem did not quite complete the course. Hidden at a strategic point en-route and out of sight of race officials waited a van with tailboard down. Contrary to the rules of the race the tandem and its occupants were conveyed between marshals finally alighting at the top of Bluebell Hill and then finished with a time that they thought would not be bettered. It was an old trick and it nearly worked. The pair who don't know that the story is out are disgraced and each owe the organisers a Toffee Crisp which is what they picked out of the "Goody Bag". Although their little plan was fairly amusing they will have to try harder next time. What is the price for glory? The department of the two cheats will not be revealed for fear of embarrassing their workmates who are

known for their outstanding sportsmanship (sic). Meanwhile the results of Derek Stone's drug test has come through and whilst it did show negative his specimen also confirmed that he is pregnant.

Steve Coates

ADD Bike Race "Tour de Medway" 1987 results for the "David Marvell Trophy"

Pl.	Name / Dept.	Time
1	Derek Stone Eng.	25.51
2	Gordon Lees Eng.	26.12
3	Jim Beane D/O	28.10
4	Andy Walter S/W	28.22
5	Rob Andrews S/W	29.18
6	Guy Gibson Eng.	29.22
7	Derek Avery M/S Elect.	29.28
8	Peter Homann S/W	30.16
9	Paul Davies S/W	30.24
10	John Crennell Calib.	30.27
11	Mike Blore Eng.	30.28
12	Mark Roberts Eng.	31.31
13	Andy Baines Prod. Eng.	32.07
14	John Seabrook Eng.	33.07
15	Ian Hallett Prod. Eng.	33.22
16	Steve Coates M/S Mech.	33.37
17	Mark Butcher D/O	34.21
18	Mike Massey Eng.	34.36
19	Rod Patterson Eng.	34.58
20	Mark Cheeseman D/O	36.08
21	Charlie Oliver Eng.	36.16
21	Mike Sprague Mech Des.	36.16
23	Alan Ward Eng.	36.58
24	Linda Mose Eng.	42.30
25	Hajinder Bahia Eng.	45.25
	Geoff Dias Eng.	D.N.F. (Puncture)
	Dave Haggarty and Malcolm Park	D.N.S.
	George Cook and Mark Tickner	Tandem Disqualified

Tour de Medway 1987

(Skulduggery in the ADD Bike Race)



Derek Avery sets the style Photo by Andy Martin



The scoundrels caught in the act



Winner Derek Stone having received his Trophy dips into the "Goody Bag" Photo by John Stewart



Gordon Lees on the way to a fast second place

The 'Vickers Furniture' Prize

Robert Jennings, Mechanical Technician Apprentice, won an important prize for outstanding achievement in his HTC course in Mechanical and Production Engineering at Mid-Kent College. He is seen here being congratulated by Bert Ives following the presentation by Mrs. Sheila Innes, Chief Executive of the Open College. Bert, who is in Technical Costs with MoD Procurement Executive on

site, was acting in his capacity as Section Chairman of the local branch of the Institution of Production Engineers. The next stage in Robert's career starts soon following promotion to Student Technologist to study for a degree at Loughborough University on company sponsorship – the course in Electronic and Manufacturing Engineering, Robert says, was chosen to reflect his career plans.



Mid-Kent College, Institute of Mechanical & Production Engineers prize winner Robert Jennings with Kent Area Chairman of IPME, Bert Ives

25 years' service

Jimmy Green completed 25 years service with the Company in April. Born in Manchester, Jimmy joined the Navy serving as a chef. He left the Navy, from a position on the Admiral's staff, in 1954 and settled in Chatham working for CAV.

In April 1962 he joined IND as a wireman. Various projects and divisional re-organisations caused him to be employed by PTE, Airspace Control, ACD, MASD and IND as a prototype wireman often working off site, at such places as West Drayton Air Traffic Control Centre.

Jimmy joined PSD in 1980 to be adopted by the Engineering Department to wire a variety of prototype equipments. It was at New Road that Ian Stitt, Divisional Manager, presented him with a gold watch and the 25 Year Certificate. Chris Humphris, Chief Engineer, then presented an engraved silver tankard on behalf of his friends in PSD. (B)



Paul Martin has been a Wireman in IND/GSD since he started, and has worked on a great many different contracts, from Blue Steel to Sting Ray. Married with one son, his hobbies are DIY and oil painting. Bob Ruggles gave his best wishes and congratulations on 25 years service. (A)



Derrick Wood, ADD's Manager, Support Equipment is another of several people coming to 25 years, who were originally in Rank Cintel at Sydenham when that company was bought out by Elliotts and became the nucleus of the present Airborne Display Division – its founder members.

Derrick has continued in ADD throughout his service, rising to his present position from Junior Engineer. His wife Maureen has also spent many years in ADD, on the Temporary Pool, and his son Adam is in CMS.

Presentation was by Robin Sleight; Derrick is seen here with him and other friends and colleagues. (A)



Open Learning – The Way Forward in Training

The traditional picture of training is of the short course or on-the-job instruction. Open Learning is a concept which has become recognised and established as an effective method of training in recent years.

The advantage of Open Learning is that the trainee can study at his/her own pace at a time and place of mutual convenience to the company and trainee. The flexible methods of Open Learning such as computer-based training, video-tape packages and workbooks, often coupled with tutorial support, can be tailored to meet the fast changing needs of individuals.

GEC also recognises that Open Learning enables the company to meet the increasing demands for training. The GEC Management College at Dunchurch has recently undergone significant restructuring to increase the variety and accessibility of training and to take advantage of the opportunities offered by management and commercial subjects to GEC and external companies, but in addition to this it is looking to establish

short technological courses and nationwide staff development centres. The secondment of Professor Ralph Smith from the Open University as director of the College brings to GEC special Open Learning expertise and links with the Open University. The GEC Management College will now develop comprehensive Open Learning provision extending the work of the GEC Technical Open Learning Centre into Management training.

As part of GEC's commitment in this field GEC Avionics has conducted a feasibility study into the introduction of Open Learning which has identified the need to establish an on site Open Learning Centre at Rochester. This will be established in this financial year and will comprise an Open Learning library of training materials, an individual study area and a fully equipped group training room. This will open up training to a wider population of staff than has ever been possible before. These opportunities will be given wide publicity when the facility has been set up.

Principal Systems Engineer, **Clive Bowles** of ADD received his Long Service certificate, and crystal ware from Chief Engineer Ian Whitehouse. Another ADD founder member, Clive has been with Rank Cintel for 13 years until they joined Elliotts, and it was 1966 when he finally arrived at Rochester. ATED was a port of call for a short time but most of Clive's time has been in ADD, on systems work on many projects from A-7 onwards. And in any spare time he has been converting an old house near Staplehurst. (A)



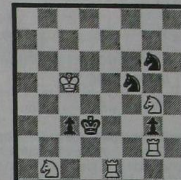
Phil Hatcher, Planning Engineer in GSD, started life as a watchmaker in Nottingham, and moved to Rochester when he joined MACD as an Instrument Fitter. When Tower 1 was completed he moved in with the newly formed FID, and in 1964 moved to Gyro when TSR2 was cancelled. By then he was Chargehand/Foreman and also Gyro's first shop steward. In 1977 Phil became Planning Engineer; 5 years ago he spent a few weeks in the USA on a training course. He has a number of interests including calligraphy and drag racing, and has recently retired from the RNR.

Divisional Manager Bob Ruggles made the presentation. (A)



CHESS PROBLEM

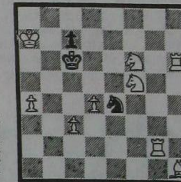
Problem No. 11
White to play
and mate in two moves



Solution to Problem No. 10

WHITE TRIPS UP
Try 1 e6e2? Waiting
1... Pc2? 2 g7a2?
Try 1 f6f2? Waiting
1... f5 any? 2 1Re3?
Key 1 f6a1? Waiting
1... Pc2? 2 f3a1 mate (set 2 Rd2 mate)
1... f5 any? 2 Re3 mate
1... g5 any? 2 Se5 mate
1... Pc2? 2 Sd2 mate

This time, White pieces interfere with White piece! Prof. Lionel Penrose (father of the many times British Chess Champion, Dr. Jonathan Penrose) arranges for White Rooks to seek waiting moves, but White moves to e2 fail because the Rooks obstruct each other. The key 1 f6a1 changes the prepared mate after 1... Pc2.



Ernie Jacobs, Technical Author in FCD, took up his pen full-time when he became a Technical Writer with TACD in 1969. Prior to that, he had been in the Navy and joined IND in 1962 as Technical Assistant, later moving to AS&RD. For some years Ernie played cornet in the Band. With him at the presentation by Brian Tucker was his wife **Doris**, Confidential Secretary in ADD QA. (B)



Maurice Ridgley, Superintendent in FCD Production, is an ex-Royal Artillery man who joined Elliotts after a short time with an instrument company. Maurice was first in TACD as Fitter on VC10, and has been in the 'control' divisions since then, working on most of the major contracts through Leading Hand and Foreman status. His wife Audrey, who is an accompanist at some local schools and used to be a singer, came in to watch Maurice receive his presentation binoculars from Ray Dennis, Deputy Divisional Manager. (B)



Continued overleaf

25 years' service

Continuation of entries from Page 9

Derek Thompson served his apprenticeship with Gordon Valves, who came into the Elliott Automation fold just as he was finishing, and later moved to Cowdenbeath. Derek then joined FID, and has spent his time at or near a drawing board in that Division and later MACD, FCD, CACD and now FCD where he is Checker Draughtsman. Among other interests, Derek follows sports. His 25 year presentation of crystal ware was made by Divisional Manager Brian Tucker. (B)



Brian Walker, who has only been in MASD for about 10 months, received his award from Divisional Manager Laurie Hampson, seen here also with Brian's wife Jean, who is a Buyer in ATED.

Brian started life in the motor trade with his apprenticeship as a fitter; the army took advantage of that during National Service and he became a driver. After that, Brian started in electronics as a Radio/TV repair man, then after a few months at CAV he came into MACD as a Tester. 12 years there followed by 12 years in IND/GSD as Test Technician, led to his present post as Test Engineer. Brian became well known to a great many colleagues in his capacity as ETU Shop Steward and Senior Steward over 10 years.



Jim Fone, Standards Engineer in GSD, came to Rochester after National Service in the RAF, spells with Rediffon and de Havilland, and 3 years at Elliotts, Borehamwood. By 1969 Jim was in IND as Modification Engineer, and has been with the build-up of Standards Dept. since 1979. This still gives him time for his hobbies of motorcycles, gardening, flying, carpentry and the National Trust.

Here, Jim admires the crystal ware presented by Bob Ruggles. (B)



Margaret Millgate, Confidential Secretary, is a Lancashire lass who came to Kent in 1962, having worked for de Havilland Propellers, now part of BAe. After an initial week with Fishers, 'to help out', she started her proper job as Secretary in AS&RD, first in the Huts then moving to the Flying School. Moving to Gyro in 1965, Margaret started her long association with Alan Essex, who was then DM, and followed the Division's many moves around the site. She is now in Tower 2, where she is seen with her present 3 bosses, (l-r) Derrick Hamlin, Group Technical Executive, Peter Smith, Marketing Liaison Engineer, and Alan Essex, Offset Programmes Manager, who made the presentation. (B)



Peter Carruthers joined the Company in 1962 as an Inspector, when Tower 1 was the only Tower, and the ground floor walls were mostly canvas and breeze blocks.

After working under Ted Paine for a while he was transferred up to the MACD Production Floor and worked on Roll Units, Gyros and later MK1 Buccaneer Systems.

He transferred to Flight Instruments Division when this was formed and remembers well the CSA, HS801 and Jaguar Analogue Computers.

Peter's hobbies include Amateur Radio and building Radio Control Model Aircraft designed in 1938.

Production Manager Fred Wickham is seen here congratulating Peter who is now working in the ISD Goods Inward Department. (A)



Ron Hawkins, Senior Environmental Engineer, CQD, seen here with his wife Mary, joined Elliott Automation as a Technical Assistant in the Environmental Test Laboratory and his first work was involved in the Type Approval Testing of the "Lightning" and "Buccaneer" Flight Control Systems. In those days the laboratory had remains of RAF occupation; little notices on doors such as "OFFICERS MESS", "CHIEF ENGINEER", and "DARK ROOM". The car park in the front had a circle of grass in the centre with a flag pole!

When equipment was being designed for aircraft such as the "Harrier" there was a need to use components for which there was no military approval, so Ron found himself in the business of component testing and failure analyses. The Company's penetration into the American market expanded this work considerably to the point that Ron's Section was eventually testing over a million components a year.

Electromagnetic compatibility (EMC) was the next challenge to attract Ron and he has spent the past nine years in this demanding field where his technical skills are greatly appreciated by customer and management alike. (A)



Retirements

We've had some recent retirements at the same time as, or closely following, 25 year service awards. Not so in this case. **Norman Pearson**, Contracts Manager of AS&RD, completed 25 years some fifteen years ago, and now after over 40 years he has laid down his pen.

It was shortly after the war when Norman left the armed forces and started work here as a cost clerk. During the late '50s he ran the accounts department, then in 1961 he transferred to the newly formed AS&RD as budget officer, thence rising to his latest position.

Divisional Manager Mike Barton gave Norman the best wishes of his colleagues and friends. (B)



As foretold last month, **'Freddie' Crewe** of MASD did receive retirement gifts. These were handed over by Laurie Hampson in the presence of a great many friends and colleagues in the Lounge Bar, who came to say farewell and listen to some of Freddie's hilarious and sometimes irrelevant reminiscences. (A)



Rose West has been a Viewer in FCD and CACD for the last 9 years or so, and was given farewell gifts by friends and colleagues some of whom are seen here. Peter Fellows, Superintendent, gave the Company's thanks and best wishes to Rose. (B)

Hugh Scott (Scotty), General Machinist, has retired from CMS. Peter Burrows, Manager, bade Scotty farewell and thanked him for his service to the Company - over 35 years. (B)



Congratulations

Weddings

John Marks, Planner in PSD, and **Carol Post** were married at St. Margaret's, High Halstow, on 13 June. The gift of cutlery from friends was handed over by Mick Meakin, Production Manager. (A)



Mick Fillon-Payoux, Senior Production Engineer, ISD, married **Kasey Ralph** on 20 June at St. Matthew's, Wigmore. Congratulations on behalf of colleagues came from Paul Robson, Margaret Turner and 'Duke' Ferris to Mick, on right. (A)



Congratulations to **Martin Wray**, CACD Estimator who married **Jane Rutherford**, District Nurse, on 27 June, at Istead Rise Church, Gravesend.

A presentation was made by **Trevor Heyworth**, Chief Production Engineer.



Birth

Lynn Barrett, last seen in ISD Marketing Dept. or on a sailing boat in mid-channel, has a new crew member for her husband **Paul**, who works in ATED. Emily was born on 20 June.

Sports and Social Club round up

GAV/BP KENT CLUB SWIMMING SECTION

Royal Life Saving Society (R.L.S.S.)

Bronze Medallion (General)

At the Club Pool on Saturday 20th June the following members passed the R.L.S.S. Bronze Medallion:

Mandy Atkinson
Lisa Strike
Paul Hampshall
Martin Hunter
Ray Newman

Paul, Martin and Ray are also active members of the Sub-Aqua Section which means the Swimming Section has taught and trained 3 Lifeguards who will be an asset to the Sub-Aqua Section.

10 out of 10

The Section has submitted 10 entrants for the R.L.S.S. Bronze Medallion – result 10 passes. The R.L.S.S. examiner commended the Section on the high standard of our teaching of Life Saving. The Section's high standards and disciplined, friendly atmosphere owes it all to our teachers, Denise Dutton

and Colin Newman. Praise from an R.L.S.S. Examiner is praise indeed – congratulations to our latest recipients of the R.L.S.S. Bronze Medallion (General) and a special thankyou to our teachers Denise and Colin. A final thankyou to our volunteer subjects: Nicola Holt, James Marshall, Josephine Baran, John Mears, Tanya Jones and Duane Hebdige.

Distance Awards

Adults		metres
Ian Venables		2,000
Marilyn Lloyd		50
Children	Age	metres
Martin Holt	12	7,500
James Marshall	13	7,500
Christopher Barton	13	1,000
Samantha Kennett	13	600
Helen Barton	10	200
Lloyd Smith	6	10
Aaron Smith	4	10
Nicholas Lloyd	5	10
Anthony Lloyd	4	10

A.S.A. Swimming Skills

Grades 1 & 2

Helen Barton

SWIMMING SECTION DIARY

MONDAY	8.15 – 9.30 pm	Adult Lessons: Beginners & Improvers
TUESDAY	6.00 – 6.45 pm	Children's Lessons: Beginners 1 & 2
	6.45 – 7.30 pm	Children's Lessons: Intermediate
	7.30 – 9.00 pm	Improvers & Squad Training
THURSDAY	5.15 – 6.00 pm	Mother & Baby Classes:
		Children from 4 months to 5 years:
	6.00 – 6.45 pm	Children's Lessons: Beginners 1 & 2
	6.45 – 7.30 pm	Children's Lessons: Intermediate
	7.30 – 9.00 pm	Improvers & Squad Training
FRIDAY	8.15 – 9.15 pm	Personal Survival/Life Saving – Children
	8.30 – 9.30 pm	Personal Survival/Life Saving – Adults
SATURDAY	1.15 – 3.45 pm	Distance Awards: Children & Adults approx. every 3 months
		Inter Club Galas 7 per year
SUNDAY	1.15 – 3.45 pm	Squad Training

NOTE: Weekend pool hours are under review.

For further information contact:

All Teaching Classes: Cynil Moffett Ext. 4241
Improvers & Squad Training: Dave Jibb Ext. 3907

Blackwater '87 – “A close run thing”

Once a year the GAv (Rochester) dinghy sailors do battle with the dinghy sailors of the Marconi Sailing Club at Stone on the river Blackwater.

This year the event was held on Saturday, 13th June. Light northerly winds and showers were forecast, the kind of weather sailors like least. However, reality was better than prediction – the winds were strength 1 to 3 and the rain did not start until late in the second race.

The first race started with force 2 winds; Peter Belcher (GAv Laser) made the best start but, despite being out in the adverse tide, the Condor and Stampede Catamarans,

sailed by Pat and Meg Fitzgerald (GAv) and T. Milton and F. Duckmanton (MSC), quickly overtook him and disappeared into the distance. There was a lot of reaching in the course (sailing across the wind) and catamarans excel in these conditions. The MSC Stampede won, 1 minute in front of Pat and Meg.

The emphasis on reaching and the strong tide made it difficult for the non reaching boat. Richard and Sharon Stone (GAv Wayfarer) sailed well to finish 4th. Lasers tend to be closely matched on speed and the finishing positions reflected how well the helmsmen started. Peter

Belcher finished third, with Derek Webb (MSC) in fifth position and Gordon Belcher (GAv) just behind, in sixth position. Steve Lord and Paul Orford (GAv Fireball) sailed better as the race progressed, and made up some of the time they lost at the start. The conditions did not suit the Enterprise sailed by Maurice and Pam Chapman (GAv), whilst their son Mark (GAv – Topper) suffered as the wind dropped towards the end of the race. Ron Greygoose and C. Willmore (MSC) both in Solos, could not match the Lasers in the windier phases and had their own private battle to finish 7th and 8th.

Overall, the various factors evened out and the result was very close, with Rochester winning by 51 points to MSC's 53%.

For the second race the wind had moved further to the east and the tide had changed direction.

The Rochester tactics at the start were unusual, to say the least, with one member of the team luffing two of his team mates over the line. Sailing back against the tide left those involved, Richard Stone and Gordon Belcher, with a lot to do. Again the catamarans disappeared into the distance, hotly pursued by Peter Belcher

and it looked like a repeat of the first race.

Luckily for Rochester, after the first lap, the weather took a turn for the worse with the wind dropping for ten to fifteen minutes.

At the time most of the leading boats were running against the tide towards a mark in the middle of the river. Those who were in the lead saw it quickly disappear whilst those behind went further inshore hoping to sail past in the reduced tide.

Patience was rewarded and those who had plugged on in the tide got the new stronger wind first. The biggest gains were made by Richard Stone who managed to keep moving

and got the new wind early. This was crucial and he went on to win. The catamarans suffered from being out in the tide too long whilst Gordon Belcher and Mike Boreham (MSC 420) really blew it by going far too far inshore which made them the last to get the new wind.

Even then things looked bad for Rochester but again fate intervened. Two of the boats, in their enthusiasm to do well, had missed a mark and had to be disqualified. So when the results were calculated by R.F. Sims, the MSC Commodore and Race Officer for the day,

Continued overleaf

Continuation Blackwater '87

MSC had won the second race by the narrow margin of 54 to 55%. Overall Rochester won by 106% to 107% a very small margin in a yacht race.

Richard and Sharon Stone won the Colwyn Stone Challenge Trophy for the best individual result, again by the narrowest of margins. They and T. Milton both had 4% points but Richard and Sharon won by having the better result in the second race.

Richard's performance was remarkable, since earlier this year he had a bad accident whilst skiing in the French Alps and had to be rushed to

Grenoble hospital by helicopter for an emergency operation. He then spent several weeks in Stoke Mandeville whilst his back healed and movement returned to his legs. He still has a plate in his back but has recovered so well that he can now take part in the fairly energetic sport of dinghy sailing with no ill effects.

This year the GAV BP Sailing Club has donated the splendid Medway Cup for the winning team. Joan Stone presented the Medway Cup to the Rochester team, and the Colwyn Stone Trophy to Richard.

Next year we need more help if we are to fight off the MSC challenge. Why not join us and enjoy a fine day out

The sailing is only part of the enjoyment of the visit to MSC. Both on and off the water the atmosphere is always very

friendly and admirably achieves the purpose of the visit, namely to foster contacts between the sites.

Gordon Belcher

RESULTS

GAV(R)	Boat	1st Race	2nd Race	Overall
R & S Stone	Wayfarer	4	3/4	4 3/4
S Lord & P Orford	Fireball	11	16	27
P J Belcher	Laser	3	2	5
G Belcher	Laser	6	9	15
M & P Chapman	Enterprise	12	10	22
M Chapman	Topper	13	12	25
P & M Fitzgerald	Condor	2	6	8

MSC	Boat	1st Race	2nd Race	Overall
D & L Boreham	Mirror	14	7	21
M & M Boreham	420	10	11	21
T Milton & T Duckmanton	Stampede	3/4	4	4 3/4
D Webb	Laser	5	5	10
R Greygoose	Solo	7	3	10
C Willsmore	Solo	8	8	16
S Evans & D Cohen	Enterprise	9	16	25

Overall - GAV (Rochester) 106% MSC 107%



Club-House attractions

AUGUST

PARLOUR DERBY (8 films)

Saturday 22nd August
8.00 pm

Music in the Bar with

"Cockney Pride"
Duo
Friday 28th August
8.00 pm

BANK HOLIDAY DANCES

Saturday 29th August
7.45 - 11.45
"SPIRAL"

Monday 31st August
8.00 - 11.00
"MESCALERO"

SEPTEMBER

A + A DISCO
for the
UNDER 16's
Friday 4th September
7 - 10 pm
Free

DANCE with

"PEBBLE MILL"
Saturday 5th September
7.15 - 11.15

Friday 11th September
INDOOR GAMES
LEAGUE EVENING
Guest

Cliff Lazarenko
8 - 11.30
Tickets £1.00 from
Committee Members
or Bar

SHANGHAI
DANCE
ORCHESTRA
Saturday 12th September
7.45 - 11.45

DANCE WITH
"MESCALERO"
Saturday 19th September
7.45 - 11.45

Inter Divisional Awards Night

Cricket - Football -
Bat and Trap
Friday 25th September
with

"CHASE"
7.45 - 11.45
Bar till 11.30

Saturday 26th September

"SPIRAL"
7.45 - 11.45

AND DON'T FORGET
- OVER 50's
EVENING

Saturday 31st October
with
"HAPPY DAZE"
£1

Reaper Club

The June meeting of the Reaper Club was held as usual in the Works Canteen, amidst all the rebuilding and refurbishing taking place. A goodly number were present, and the usual roll of honour was read, detailing the Birthdays and Wedding Anniversaries. There was one Golden Wedding being celebrated and the usual presentation and musical honours were given. The entertainment was a programme of music by the Works Band, under its new director Mr. Fred Clarke. It was a mixture of tunes, which was a delight to listen to. The audience showed its deep appreciation of the programme by the heavy, long and sustained applause. Last call for names of those wishing to go to Eastbourne in July was made.

The July meeting was affected somewhat by the stormy weather. The Roll of Honour revealed that Mr. & Mrs. William (Darkie) Hobson, were celebrating their Golden Wedding. The President presented the Club gift, and the whole company joined in the musical honours.

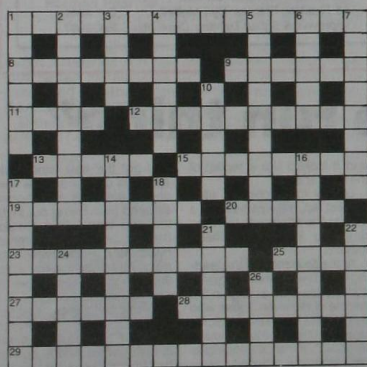
The billed entertainment of Surprise! Surprise! turned

out to be a programme by the School of Irish Dancing, performed by young pupils of the School. The footwork was sheer magic, and the continuity of the whole programme not only entertained us, but also amazed the whole audience. A delightful evening which will be talked about for a long time. The Pick up Points for the outing to Eastbourne were announced, and the evening concluded with 3 games of Bingo.

The outing to Eastbourne, on Wednesday July 22, was not one of the best we have had, due to the weather. We left Rochester in rain, and on the journey it kept with us in varying degrees of severity. It was raining hard as we disembarked, and folk made for shelter.

However, during the afternoon the rains ceased, and the roads dried up, until a little before we left when a slight shower developed. On the return journey, it was a delightful summer evening, until we reached Mereworth, when the rains came again, and stayed with us until we all reached home.

In spite of the weather, everyone found enjoyment and pleasure in the outing.



Crossword No. 85

For amusement only

ACROSS

- Recorded as the final utterance. (6-4-5)
- Realistically clean. (8)
- Otherwise archers. (6)
- Children often are MPS with I. (4)
- A modern material, strong but light. (5-5)
- A panorama, or near sights and opinions. (5)
- Description of one, having been through the courts. (8)
- Between acts or events. (8)
- Don't drop it, may cause mayhem. (5)

- A national pastime of old Tibet. (4-6)
- Apply it to yourself, mind or actions. (4)
- Nasty small insect with antennae. (6)
- Is it a fruit or vegetable? Try salad. (8)
- What the gunner tries to hit - bang. (6-9)

DOWN

- An ancient find when excavating. (6)
- Topic for anxious discussion in old town halls. (4-5)
- Opposite of beauty. (4)

- Who the song writer says he loves - Scotch. (6)
- Could be a sinner or criminal. (9)
- South American graduate dance. (5)
- Implies evil connotations. (8)
- Teach, instruct or travel mode. (5)
- Decisions of conflict emanate here. (3-6)
- Was he killed by a sparrow? (4-5)
- Prescription to end down in the mouth feeling. (4-2-2)
- The whirl of outer bud case. (5)
- Mute part of honour, or its lack. (6)

- Real good sports, male or female. (6)
- ... a tantrum, or toss it away. (5)
- Man made canal of east and west value. (4)

Solution to Crossword No. 84

Across
1. Cinque Ports; 9. Resin; 10. Conqueror; 11. Ahoy!; 12. Zinc; 13. Drank; 15. Unknown; 16. Albumen; 17. Yelling; 20. Taunton; 22. Okapi; 23. Rail; 24. Meal; 26. Execution; 27. Boers; 28. Able.
Down
1. Cassock; 2. Nine; 3. Uction; 4. Panacea; 5. Round about; 6. Sarcasm; 7. Treasury notes; 8. Broken English; 14. Solitude; 18. Leaders; 19. Garnish; 20. Thinner; 21. Theseus; 25. Able.

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

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