

MARCONI AVIONICS NEWS

Naval Journal of Marconi Avionics Limited



MOTTO FOR THE MONTH
"Only poverty is got without pains."



HELIOPHOBE ODE

Have you ever stopped to wonder
Just why we're given light?
And why God didn't leave us
In perpetual state of night?

Maybe He intended
That the sun should help us see
It gives us warmth and comfort
And it's there for you and me

So when it shines upon you
Please don't be annoyed
Don't pull the blinds or curtains
The sunlight to avoid

You're not the only person
To work in MEA
And those of us who want the sun
Should also have our say.

Anon



NEW YEAR HONOURS FOR MARCONI AVIONICS EMPLOYEES

Mr. A.J. Harrison, Director of Manufacturing Services of Marconi Avionics Limited, has been appointed a Member of the Order of the British Empire in the New Year Honours List

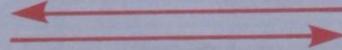


A.J. Harrison, MBE

A.J. Harrison, 68, who joined the Company in 1958, has inspired the expansion of its production facilities during the past 15 years. His responsibilities for production, cost control and purchasing, began at the Rochester site. On his appointment in 1973 as Director of Manufacturing Services, he became responsible for co-ordinating these activities at the Basildon, Borehamwood and Rochester establishments of the Company. Since then the Company has nearly doubled its workforce and has kept the lead as Europe's top producer of aviation electronics for civil and military aircraft.

Mr. Harrison who lives in Wilson Avenue, Rochester, is a keen sportsman. He was a well-known amateur boxer in his youth and is currently a member of the MCC. He devotes considerable time to the Company's sports and social activities, particularly in support of youth. He is President of the Marconi Avionics Golfing Society and of the Company's Concert Brass, the only brass band in any GEC Company. He is a liveryman of the Worshipful Company of Instrument Makers.

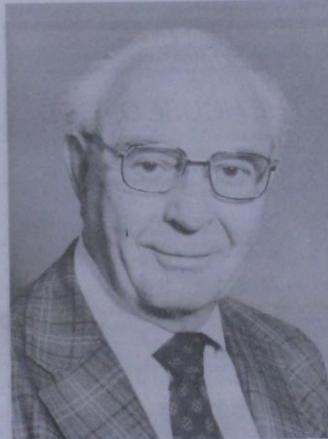
A.J. Harrison's name is associated with very high professional standards applied to production throughout MA, and the honour done to him is also a recognition of the continuing work of the team he built himself.



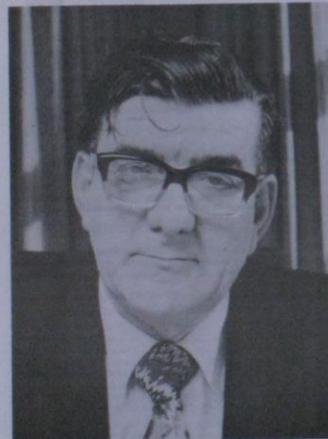
Jess Griffiths, 71, is well-known nowadays as founder and editor of Marconi Avionics News. He joined the Company at Rochester in 1963 and has had a long and varied career in production engineering and production management. His distinguished public life includes serving on local councils in Northants, Warks and Kent and being a lay pastor, trade unionist (one-time Area Secretary of the then ASSET, now ASTMS, union) and a well-known lecturer and public speaker.

Married for 46 years Jess lives at Frindsbury. Born in Northants the son of a canal boatman, and made fatherless at 4½, Jess Griffiths started work at the age of seven, delivering milk. His hobbies include printing, bowls, meeting people and speaking at social, cultural and political gatherings.

Mr. J. Griffiths, Production Engineer with Marconi Avionics Limited until his retirement, has been awarded the British Empire Medal in the New Year Honours List



Jess Griffiths, BEM



Aeronautical honour for Marconi Avionics Chief Executive

J.E. Pateman CBE receives the Royal Aeronautical Society British Gold Medal

Mr. J.E. Pateman CBE, Managing Director of Marconi Avionics Limited, has been presented with the British Gold Medal of the Royal Aeronautical Society at a ceremony at the Society's London headquarters on 10 December. In making the award, the aeronautical profession has drawn attention to Mr. Pateman's outstanding achievement in building up British technical and industrial leadership in the avionics field.

This achievement is reflected in the Company's remarkable performance, particularly over the past decade, when some 8000 new jobs were created, the Company trebling its size to become Europe's biggest producer and Britain's top exporter of aviation electronics.

An established supplier in the very competitive United States market, Marconi Avionics leads in the production of head-up displays, for F-16 and A-7 aircraft in particular, produces automatic throttle control systems for Boeing 747 aircraft and advanced air data computers for Bell Helicopter Textron and for the US Army, Navy and Air Force. The Company has continued to

make substantial investment in new technology as part of its strategy to secure jobs.

Jack Pateman CBE, F. Eng., M.I.E.E. joined Elliott Brothers (London) Limited in 1948 and became involved with avionics in 1952, when the Aviation Division was formed. He became Joint Managing Director of Elliott Flight Automation on its formation at Rochester in 1962 and thus led the Company continually through its phases of growth and later development as Marconi Avionics Limited. He was appointed Managing Director in 1971. Under this leadership, the Company has won the Queen's Award to Industry seven times, five of them for export achievement. He is on the boards of a number of GEC Companies. His services to export were recognized by the award of the CBE in the 1970 New Year's Honours List and he was elected to the Fellowship of Engineering in February this year.

Mr. Pateman, born 29 November 1921 and his wife, Cecily, live at Ivy Hatch near Sevenoaks. His hobbies, when time allows, include gardening and sailing.

Jack Edward Pateman CBE, F. Eng., M.I.E.E.
Managing Director of Marconi Avionics Limited, Director of the Canadian Marconi Company, Chairman of GEC Computers Limited, Director of Elliott Brothers (London) Limited, Director of Marconi Avionics Projects Limited, Director of Marconi Electronic Devices Limited.

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 Erik Luff (Calibration) and John Brambleby, GYRO
 Others are required for: AS & R (New Road), CGO,
 AS & R (Flying School), RAS,
 CMS.

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



Roll on summer



POOR RESPONSE

As there was such a poor response to our Christmas competitions (last edition) we have decided to extend the closing date until 1 March 1982.
 There are still lots of money prizes to be won in both the adult and childrens competitions.

This modern hymn, written by the mother of one of our employees can be a personal expression of faith.

THE HOUSE OF GOD

Tune: Carlisle

*This is the House of God,
 We sing our praises here;
 We bring to Him our grateful thanks
 For many a faithful year.*

*This is the House of Prayer,
 Built up with loving hands
 Of those who loved and served their Lord,
 And followed His commands.*

*This is the House of Grace,
 A place of hope and love,
 Where sinful hearts may find their peace
 In blessings from above.*

*This is the House of Faith;
 Built up with loving hands
 The sins that strain our nation's life,
 And conquer through His might*

*This is the House of God;
 O may we faithful be
 To serve His cause, and do His will,
 And then His face to see.*

Annual pantomime

The annual pantomime, put on by members of the Management Committee of the Sports and Social Club, will again be held in the canteen on 26, 27, 30, 31 March and 1, 2, 3 April. For 1982 the production will be staged under the title **Jack and the Beanstalk**.

Following the very successful amalgam of last year, a similar mixture will be applied.

The usual hilarity will be a highlight of the production with 'Gert' and 'Daisy' vying to send the audience into hysterics. The preview indicates it will be a spectacular and colourful show. Anyone who has seen previous productions will agree on the comedy content and with musical extras by the Elliott Concert Brass Band, it promises to be another show to be remembered.

A charge of £1 admission is being made, all of which will be devoted to charity. In former years most of the nights were allocated to GAF and Senior Citizens Clubs, as an experiment, all types of audiences will be welcomed at any performance this year.

The proceeds of the pantomime totalled £1300 last year, it is hoped to better that total in 1982. Tickets are available on application from the Sports Club office (int. 2217) or divisional Sports Club representatives.

Births

Congratulations to Ann Rayfield, formerly a Scheduling Clerk in PSD, on the birth of her daughter Sarah Jane. Sarah was born at All Saints Hospital, Chatham, on 2 January and weighed 6lb 10oz.

To Jean Branaghan, formerly in Gyro Division, the gift of a son, Daniel, at 7lbs 14ozs.

Engagement

We congratulate Miss Sharon Lewis, Secretary to Mr. J. Smith, CACD Production Manager, on her engagement to Steven White.

Marriage

Miss Jackie Lacy of PSD was married on Monday 18 January 1982 at Chatham Registry Office to Trevor Burns. Jackie is a Library Clerk in PSD, she has been there for 3 years and before then worked in Gyro Division for 7 years.

'Doubles'

Not many people bothered to let us know if they were 'seeing double' or had any look-alikes around them, as asked for in issue 38.

However we thank ATE for their list, sent to us in the form of a verse.

*If you visit ATED
 And do not wish for trouble,
 Gently bow to Prince Charles
 Or is it his double?
 Bernard Bresslaw's carrying on
 And look there is Michael Caine,
 Noel Edmunds strolls on by,
 And there's Adam Ant again.
 Do you see double, Jess Griffiths asks
 Yes—also ghosts are seen.
 I know he died long ago—
 But isn't that James Dean?*

Can you help?

Lift required to Airport Works

Anyone travelling from Wayfield Road area (or through it) and has a seat to spare, please contact Clare in Corsair Building, ADD, (int. 2702).

She starts 8.30am until 4.30 or 5.00pm and is willing to contribute towards petrol.

BUS SERVICE

I am making a survey to see how many people would use a bus from Thanet to Rochester, if one were organized along similar lines to the 'Whitstable Flyer'. There are more people than you might expect making this journey so if you are interested, please fill in the form below, including any suggestions and send, through the internal post to Allan Holmes, CAC Engineering, Phase III Building.

I am interested in a bus service from Thanet to Rochester.

NAME

DEPT.

DIVISION

LOCATION

INTERNAL TELEPHONE

HOME ADDRESS (if you don't wish to give your address please suggest a suitable pick-up-point)

Timeless elements

*Eternal, blue and dazzling the broad summer sky
 Shimmering vault spanning all horizons lost in pearly haze,
 No clouds to dapple this ethereal mantle where seaquits fly,
 No contrast in the azure depths of this infinite ceiling illuminating
 all my summer days.
 Perfect union where sky meets sea; no line to mark this unreal
 boundary.
 No ship to mar this blend of elements; this immense mirror
 image of all eternity
 Flawless curtain of intense blue shading polished lapislazuli.
 Virtual baccloth for orb or burning topaz, scanning sea like
 Cyclopean eye.
 No shade from blinding golden light, riding the ecliptic high,
 Reflecting cosmic winds and warmth from summer sky.
 Source of life and light whose refractions enrich the palette of
 Apollo to colour mother earth.
 And all her timeless elements, by which man may know his true
 diminished worth.*

L.A. Trafford, ISD

CASTAWAY



Mrs. Joan Golding of ISD Library, who has been with the company for 8 years, is the first castaway for 1982. She is the leader of the Gillingham Corps of the Girls Venture Corps and has held that post for 7 years. Her husband Sid (Victor), son David and daughter Ann also work for the Company.

MUSIC

The Love Theme from Spartacus by Khachaturian—I am spell bound each time I hear it (unusual for me)
 Scherzade by Rimsky Korsakoff—To conjure up all the stories associated with it.
 Cavatina recorded by John Williams—another relaxing record.
 On a Clear Day sung by Barbra Streisand—so that I can join in.
 Jerusalem by Blake—for sober moments, to give me strength on 'down days'.
 The Entertainer by Scott Joplin—a lovely piece from 'The Sting'. I could keep fit-exercising to this.

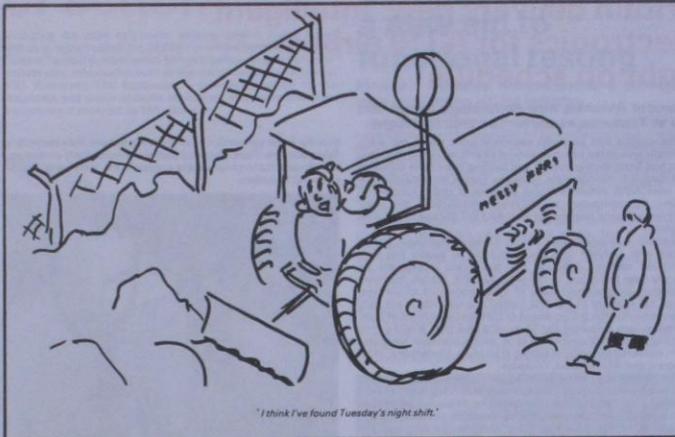
BOOKS

Pride and Prejudice by Jane Austen—I never tire of her use of the English language, apart from enjoying the story.
 Wind in the Willows by Kenneth Grahame—treasured memories of childhood, when our teacher made the story come alive as she read an instalment each Friday afternoon.
 The Concise Oxford Dictionary—to learn new words and their meanings, to help in word games and crosswords for when I am rescued.

The blizzards!

Monday 13 and 20 December 1981, were days which will not be forgotten in a hurry. After most people had spent time digging themselves out, to start the journey to work, they found that they were unable to enter from the A229. The security team and works engineering personnel worked very hard to enable a way through to be cleared. Many people were of the opinion that nothing was being done, but the teams were endeavouring to make an impact, before the first workers were due to arrive. Then there was the hazard created by those who abandoned their vehicles, when progress was impeded, within the entrance roadways and public highways. The height of folly was reached when vehicles were 'dumped' in private driveways. City way was typical—blocked by snow and abandoned vehicles, strewn at all angles.

Our pictures show the extent of the downfall and the efforts that were made to deal with it by hand and by machines.



Packed snow/ice being 'dug' by hand.



Over the airfield fence goes another bucketful.



Snowplough trying to break through.



The depth of the drifts can be gauged against the machine.

IN LIGHTER VEIN

St. Lawrence Revisited

Standing under the 'Great Oak', that famous tree just inside the boundary, planted to commemorate the bowling feats of that Kent stalwart of yesteryear, 'Tich Freeman' brought memories of our summer game flooding back. On a chill November afternoon with the last golden leaves fluttering to the ground in a north easterly breeze, it was easy to see in my mind's eye that greatest living Englishman Geoffrey Boycott of Yorkshire and England grinding away to accumulate forty runs in forty overs thus ensuring a Kent victory by nine wickets, in a John Player Sunday game.

Tich Freeman, of course, went on to near immortality by opening an international chain of quality suppliers in partnership with Mr. A.A. Hardy of Somerset and Mr. R.G.D. Willis of Warwickshire and England.

More recently that flowing Scot Mike Denness, who went on to captain England so successfully, graced the green turf. It is a little known fact that Mr. Denness was once appointed stipendiary cricket coach to our own 'Bill' Alexander. The coaching paid handsome dividends particularly on that never to be forgotten occasion when opening the innings for a Gyro Division Invitation Eleven against F&R.L. Free Forresters he scored 38 runs from the first over bowled by S.M. Ellis of New South Wales and Australia, the Free Forrester Skipper. The innings continued at a furious pace and would probably still be in play had not a visiting platoon of the Cornish Light Cavalry (Eric Skentelbery's own been called in to clear the pitch, which was required that evening for an archery contest. In the ensuing melee Mr. Ellis received a flesh wound and it is said, still limps to this day.

The turf at St. Lawrence has always been the envy of other

counties and its quality probably stems from the era when it was tended by that legendary groundsman Ron 'The bike' Brunger. Mr Brunger achieved lasting fame as he was the only county groundsman ever to compete in the Tour de France cycle race. He was a majestic sight on match days, towing the heavy roller behind his old Rudge Sports—he swore that ten lengths of a cricket square was worth a hundred miles of road work.

He came to an unfortunate end. As the tour passed through Lucerne he was savaged by a Swiss chocolate manufacturer incensed at the falling sales of Toblerone to the United Kingdom and was never seen again.

However, shortly afterwards a limited edition of hand-carved bone cuckoo clocks came on to the market, but the cuckoo had been replaced by a tiny bone man on a bone bike towing a tiny bone roller. Only one of these clocks now survives and can be seen by MCC members in the Long Room at Lords.

John B.

Britain delivers new 'intelligent' electronics for A310 airbus—right on schedule

Marcóni Avionics new-technology computers are at Toulouse, ready for the 1982 first flight

The world's first all-digital electronic units which can automatically ensure the safe operation of an airliner's wing-mounted slats and flaps, during take-off and landing, have been delivered on schedule to Aérospatiale, Toulouse, France, for installation on the new A310 airbus. Marconi Avionics is under contract to supply the computers to Liebherr Aero-Technik, the West German company responsible for the A310's slat and flap control system.

Marcóni Avionics Flight Controls Division, Rochester, joined forces with Liebherr in a successful bid to supply this very advanced system. Although the computers incorporate an entirely new technique in 'fail-safe' systems design, involving separately programmed pairs of microprocessors of different types, the delivery of the first control channel was made only seven months after the go-ahead and the first aircraft set of flight hardware was delivered just 14 months after that. A further five units of the control electronics to 'A' model standard, have also been delivered for systems testing at Liebherr, Lindenberg; VFW, Bremen, and Aérospatiale, Toulouse.

The microprocessors are used to control the positioning of slat and flap control surfaces in response to pilot commands. In-built protection features prevent the retraction of leading edge slats below the safe limiting value of wing incidence and inhibit wrong operation of the powerful flying controls. In addition, any condition which might cause asymmetric operation of slats or flaps (i.e. operation on one wing only) is prevented, and any failure which might cause a control surface 'runaway' is automatically isolated. The unit has been described as 'intelligent', because it can assess the validity of slat and flap commands, detect failures in the electronic, electro-hydraulic or mechanical parts of the control system and communicate information to the flight crew.

The high degree of integrity required has been achieved through the use of dual-control systems, in separate units, each of which contains duplex electronics for slats and for flaps. By careful design, only six types of electronic sub-assembly are used, each appearing four times in the complete aircraft installation, conferring important logistic advantages.

The use of dual dissimilar microprocessors and software ensures that a fault in the program of either of them will be detected by the other, a safety measure which avoids the disadvantages of having an analogue control lane as an extra safety monitor. The microprocessors used are the Intel 8085 and the Motorola 6800, both of which are approved for airborne applications.

The dual software required for this high standard of performance and safety has been prepared and tested within the short timescales involved. The control electronics can be adapted or configured very efficiently for use in other airliners. The fact

that the latest generation of airliners are to have their secondary flying controls (flaps, slats and spoilers) electronically controlled, has already led to considerable interest in the 'intelligent' design of the A310 system.



Two of the engineers in the Company's Flight Controls Division who are closely involved with the A310 slat and flap control system are (right) Geoff Holland B.Sc., C.Eng., M.I.E.R.E. who is pointing out one of the Fairchild 6800 microprocessors used in the system, Anthony Brown B.A., B.A.I. (left) is indicating the other, an Intel 8085.

Geoff (38), is the Project Leader responsible for the A310 SFCS. He has been with Marconi Avionics for 3½ years and lives in Chatham. Anthony (22) is a Development Engineer. He is starting his second year with the Company and lives in Rochester.

Rhine Army HQ gets communications system up-date

Marcóni Avionics tailors a cost-saving design, including TV, to army requirements

A new audio and visual communications system, for vehicles which collectively form a mobile headquarters, has now been put into operation successfully by the British Army of the Rhine. To meet BAOR's precise requirements cost-effectively, Marconi Avionics Limited has engineered the fully-automatic multi-vehicle installation so as to make use of proprietary television. In addition, the system's specially-developed intercommunication equipment has been built to commercial standards.

The Company's Electro-Optical Products Division, Basildon, has supplied this very comprehensive system, under a ministry of Defence (Procurement Executive) contract, valued at approximately £1 million. It replaces an original equipment, which has been in operation since 1967. The new system is easier to use and maintain and makes use of modern, readily-available commercial equipments, which in general cost less than those designed to military standards.

The mobile headquarters comprise a set of 4 ton cabin vehicles, which can be brought together and interconnected so as to carry out all the functions of a fixed-site HQ. The use of television enables information to be exchanged between the Commanding Officer and his staff working in the various vehicle cabins.

The system comprises the Army-designated 'ESSEX' (electronic solid-state exchange) communication system and a closed-circuit television system based on Marconi Avionics highly-successful V327 modular camera channels, with associated monitors and video cassette recorders. ESSEX comprises a central Communications Control Unit and 20 'subscriber' units located in the HQ vehicles. Communications externally are via the army's normal telephone network.

The elements in the system are installed in different combinations in the various vehicles, and Marconi Avionics senior engineers studied carefully the way the army used the original system before designing the up-dated installation. This work extended to defining the layout and interior design of each vehicle. Control vehicles were equipped and fully tested by the Company in the United Kingdom. Systems for the staff vehicles were then supplied, in kit form, for installation by the army in Germany.

Following commissioning of all the vehicles involved, as a complete HQ system, successful field trials of the mobile HQ have now been carried out.

Marconi Avionics makes new senior marketing appointment

Ray Dennis becomes Marketing Executive of Flight Controls Division

Marcóni Avionics Limited has made a new senior appointment in its Flight Controls Division, Rochester. Mr. R.W. Dennis B.Sc., MRAeS, has been appointed Marketing Executive, responsible to the Divisional Manager, Dr. J.F. Russell. In this capacity, he will lead the division's marketing and sales activities.

Ray Dennis, 34, who was formerly Engineering Manager of the Company's Flight Automation Research Laboratory, Rochester, is now joining a division which is responsible for such products as the automatic throttle control system for the Boeing 747, the microprocessor slat and flap computer for Europe's new A310 Airbus, the automatic flight control system for the Westland Lynx helicopter and the automatic control and remote guidance

systems of unmanned aircraft, such as the new ASAT drone of Flight Refuelling Limited.

Mr. Dennis started his career with the Company as a student apprentice, graduating in Electronic Engineering at City University. After gaining marketing experience with another company and working for a time for the Ministry of Defence, he re-joined Marconi Avionics in 1979, as Project Manager in his former division.

He lives in Rainham with his wife Jacqueline and two children, James 5 and Krysis 2. His hobbies include yoga and playing the guitar.

Suggestion Scheme Awards

Among the recent awards made for suggestions, Mr. N. Perkins, an apprentice in ISD, received a cheque for £58.16 for the suggestion:

'An aid to testing and increase safety of insulating testing of PC boards in ISD.'

Mr. Ray Reece is shown presenting the cheque.



New radar sensor to measure levels in storage bunkers

Coal Board application for Marconi Avionics radar techniques

A new equipment, which uses radar to sense automatically the level of coal in underground vertical storage bunkers, is being developed by Marconi Avionics Limited. The Company's Mobile Radar Division at Borehamwood, has been selected by the National Coal Board to develop the new equipment which is to be rigorously tested under mine conditions.

The efficient use of vertical storage bunkers, now employed in increasing numbers in coal mine underground coal clearance systems, is critically dependent on knowledge of the level of material they contain, giving rise to a need for accurate detection and remote indication. Studies made by the National Coal Board's Mining Research and Development Establishment have led to the selection of radar techniques for this duty and, because of its wide-ranging expertise in mobile radars (especially of the coherent type), Marconi Avionics was selected as being most likely to bring MRDE's conclusions to practical realization.

The new J-band FMCW (frequency modulated continuous wave) equipment, using the latest radar signal processing techniques and employing microprocessors, will be designed to measure the level of material in a bunker to $\pm 5\%$ over a range of up to 80 metres.

The radar (which is about the size of a small suitcase) consists of two units, a transmitter/receiver unit incorporating the microwave and microprocessor circuitry at the head of the bunker and a conveniently placed remote interface unit, providing both analogue and digital outputs for display and control purposes. The equipment is designed to meet stringent safety requirements for operation within coal mines.

The new radar has potential applications in the coal industry world-wide and may well find applications in other industries employing bunkers or silos.

Appointment

The appointment of Mr. E.J. Bradley to be Director of Personnel, Marconi Avionics Limited, has been announced.

Mr. Bradley will be responsible for personnel policy across Marconi Avionics Limited. His broad responsibilities will be to initiate the operation of Company personnel policies whether emanating from GEC or MAV. This will include senior appointments and salary administration, industrial relations and ensuring that the long-term development of manpower resources is fully effective. He will report to the Managing Director.

Dressed for action

The photograph shows Dr. Bernard O'Kane, Chairman of MAV (2nd left), and Mr. Paul Rayner, Assistant General Manager (3rd left) dressed for action before flying in a Mk II Nimrod engaged in anti-submarine surveillance duties from RAF Kinloss. With them are members of 206 Squadron, one of the three Nimrod Squadrons based at Kinloss.

MAV provides several major systems aboard the Mk II Nimrod



including the main submarine sensing system (using sound waves in water) called the AQS01 provided by MASD, and the Central Tactical System which brings together, on a tactical information plot, information from all the aircraft sensors provided by IND. Automatic Test Equipment is provided by ATED for the diagnosis and repair of faulty equipment and communications equipment is provided by MAV Basildon.

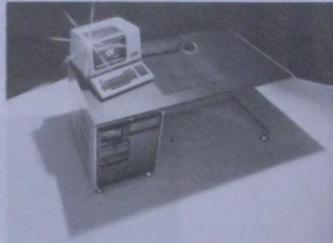
Compact Alpha— a new aid to functional testing

Marconi Avionics demonstrates a powerful new production aid for industry

A new, easily-installed automatic test equipment, with a surprisingly powerful capability for functional testing, and able to diagnose faults in electronic cards and other sub-assemblies, is now announced by Marconi Avionics Limited. Known as Compact Alpha, it is designed for use by non-specialist operators in the growing number of industries which apply electronics in their products, including microprocessors.

Compact Alpha, produced by Marconi Avionics Automatic Test Equipment Division, Rochester, is designed for ease of operation and yet is one of the most powerful of this class of ATE. It is compatible with a variety of commercially-available instruments and incorporates a novel interface design, eliminating the need to stock expensive adaptors for each test subject.

The new machine was demonstrated for the first time publicly at the ATE Exhibition (Brighton 8-10 December 1981). The version exhibited, which is illustrated above, has a 10MHz (10 million cycles/second) dynamic capability, to cover every kind of fast processing device in current industrial use. Its 200 pin capacity (handling up to 200 input/output channels) covers most industrial uses and is capable of further expansion.



Marconi Avionics boosts computer-aid investment to secure jobs

£¼ million computer-aided engineering facility opens at Airport Works, Rochester

A new computer-aided engineering (CAE) facility, with equipment worth three quarters of a million pounds, was opened at the principal factory of Marconi Avionics Limited, as part of an investment strategy to secure jobs at the plant. The facility, formally opened by Mrs. Peggy Fenner, MP for Rochester and Chatham, is the latest in a succession of computer aids, which have proved key factors in the Company's successful development during the past decade.

Mr. J.E. Pateman CBE, Managing Director, has stressed the significance of investing in computer aids, at a time when many other companies are having to cut back their staff and investment. According to Jack Pateman:

'Our policy of investing in new technology has paid off handsomely in the creation of thousands of new jobs in Medway alone and is our best hope of securing those jobs for the future. We have continued to win new export orders for high-technology equipment, in the world's toughest markets and, provided the Ministry of Defence does not make any more cuts at home, jobs at Rochester should be secure through 1982.'

The new equipment, supplied by Applicon (UK), is the latest in a succession of CAE and computer-aided manufacturing facilities in use in Marconi Avionics factories. The Company's annual investment in plant and equipment, including computer aids, is already 50 times the value of the new facility, a factor which has enabled it to grow into Europe's largest organization for aviation electronics, the UK's biggest exporter and, with a team of some 6000 in the Medway area, its biggest private employer.

Computer-aided engineering, a prerequisite for many United States aerospace contracts, involves the use of work stations, with video displays and controls, computers and various peripheral equipment. They enable engineers and designers to create new system designs more quickly, reducing errors and enabling better use to be made of all the information available. They also enable the increasing amount of technical data involved with avionics to be communicated more effectively to



The Chairman, Dr. O'Kane (2nd left), with Mr. R. Howard (Director and General Manager), Mr. A.E. Mulford and Mrs. Fenner MP.

experts within the Company and at customers' establishments.

The recently-won contract to create a new range of air data computers for the US Navy and US Air Force has, for example, taken full account of the Company's established computer-aided design and manufacturing facilities at Rochester. The value of potential production, already depending on such aids, is now several hundred million pounds, for contracts already held at Rochester. Similar aids are extensively used, as appropriate, at the Company's Herts, Bucks, Essex and Avon factory locations.

The new CAE facility at Airport Works is the Company's first with multiple work stations in one location, to complement those elsewhere in the factory, and is more advanced. An important attribute is an ability to design very large scale integrated (VLSI)

ATE shows its wares

This photograph was taken at the ATE Exhibition at Brighton in December 1981. ATED exhibited for the first time, their new ATE — Compact Alpha — which generated a lot of real interest amongst potential customers.

The photo shows the Mayor of Brighton, Councillor Joseph Wakefield accompanied (on his right) by Mr. Harry E. Drew, CB, President of the IERE visiting our stand and being 'sold' Compact Alpha by Geoff Rands and Harry Martin (ATED).



circuits (sometimes referred to as 'microchips'), which are manufactured in the United Kingdom by Marconi Electronic Devices Limited. This capability is of great significance in meeting the latest standards for new avionic equipment and to developing Britain's participation in VLSI business. The Applicon equipment, which has colour displays and can print designs in colour, has other world-leading advances, as demonstrated at the opening ceremony.



Mrs. P. Fenner MP raises a point of interest.



Group interested in the working of a 'station'.



One of the workstations being operated.

www.rochesteravionicsarchives.co.uk

The Annual Dance, Roy



We're sitting this out.



'Andy Ross' Music in action (the ladies are not easing the microphones).



And they eat too!



Who will be the lucky ones?



Together



Joyce shows appreciation.



Bending to the beat.



Let's all jive.



—and the sedate.

al Star Hotel, Maidstone



Rapt attention.

Even I think its funny.



erness.

No! You're wrong—they are dancing.



Very good!



Relaxing in a happy mood.



Really funny.

Elliott '65 Club

The photographs show our members in a party mood at the annual Christmas party, held on 15 December at the Featherby Road club-house.

Music for dancing was provided by 'Arthur Brown and his boys', who received a donation on behalf of R.N.L.I. The cabaret, supplied by Ken Trafford and Rita Cook, was greatly appreciated by everyone.



RETIREMENTS

MASD has paid its tribute to **Peggy Harvey** on her retirement and was deluged with cards, gifts and good wishes. She worked 8 years in the Paint Shop, masking cards etc., and then joined MASD Production Control Department, where, in the words of the Production Manager - Mr. J. Goodhand - "She did a marvellous job, and will be hard to replace, progressing cards." During the 2nd World War Peggy did her bit too - she became a milk roundsman (or is it roundsperson?), driving a horse and cart!

She is a grandmother and herself the mother of five children. Among the many gifts she received was a cassette radio recorder, which Mr. Goodhand handed over, on behalf of all the subscribers.

In her honour, the divisional poet penned these lines.
 Our Peg leaves today, for she is to retire
 And forget all those problems with boards.
 She can now sit and think of the things she'll require
 For that luxury cruise on the Boards!
 Her devotion to duty will now be indoors
 With time for some leisure and ease.
 It's just that we'll miss her with packets of draws
 As she pro-gressed her PCBs.
 Now they say she packed lunch rather hasty
 And once caused her hubby to moan.
 For the dog got the salad so tasty
 And Maurice the succulent bone!
 She can leave all those 'T' cards, and bright coloured 'P'
 cards
 To George and the rest of her team.
 For we wish her good health, and plenty of wealth,
 To fulfil her most wild cat dream.



Peggy Harvey, MASD. (C)

John Clarke, 'Nobby' to many friends, retired from PSD Production on Christmas Eve. Having joined the Company in July 1973, Nobby was a General Hand at the Company training school in Hopewell Drive, and later in 1978 transferred to PSD Production as a skilled labourer. Nobby had had an interesting boxing life during his Navy years although he was very modest to admit this. Starting at Fulham Boxing Club at the age of 14 years, Nobby took part in many contests but it was during his Navy boxing career that he was able to realize the titles of ABA champion 1936 - welterweight and Chinastation Champion 1938 - welterweight. After leaving the Navy, he continued boxing professionally at Rochester Casino.

His parting gifts included a model of the trolley that he had used a great deal in performing many of his duties.

(Photograph will appear in next edition of MAV news)

One of those who retired in the later part of 1981 was the well-known **Ron Milne**, who was the Chief Estimator for MAC and later FCD.

Ron was a native of Selling and began his career with Simon Langton of Canterbury, General Engineers, as Fitter and Turner. In 1933 he joined the Army as a Fitter in RASC, serving aboard in the Western Desert and Palestine. He continued his association as a 'Terrier' for 9 years. Returning to England in 1936, he went to Tilling Stevens at Maidstone, in the M/C Shop, and in 1938 came to Rochester with Shorts at Seaplane Works. Recalled to the Army in 1939 he went to France, and in 1940 returned from St. Nazaire, when Shorts Bros. reclaimed him for industrial service. Later he worked as a Maintenance Engineer for Bowaters at Kemsley Mill.

In 1951 he came to Swift and Swallow, as a machine worker, and later went into MER as a Ratfixer, also doubling in planning and estimating. Then to IN Division as a Planner before breaking his service, by going over the Airfield, to work in Shorts Machine Shop as a Planner. After one year, he returned to Elliotts and joined MAC as an Estimator, moving upwards to become Chief Estimator, which position he held with the merged division of FCD, and again CACD, but gave up the position to become Senior Estimator shortly before his retirement.

One of the earliest members of the Flying Training Scheme he was a licensed pilot and became well-known in the Flying Club circles. He had visited the USA on Company

business and says he has a liking for travel. With a compelling passion for motor cars, he looks forward to filling his time helping out friends with servicing.

He received a watch with the good wishes of his many friends and colleagues.



Ron Milne.

November 1981, saw the departure into retirement of **Fred Murton**. This was the second time in his life that he had retired. A native of Rainham, he went to school at Chilham and joined the Royal Navy as a boy seaman, training on HMS Ganges. He specialized in gunnery and at the outbreak of war he was in Chinese waters where he volunteered for special duties, arriving back in England in time to assist at Dunkirk. In 1941 he returned to sea again in HMS Pelican doing 'U' boat hunting off North Africa and Normandy landings. In 1949 Fred was commissioned as a Gunnery Officer and did a world-wide service, including 6 months in Antartica. He retired in 1965 as a Lieutenant.

He came to Elliotts, on leaving the forces, and took up duties in MAC and FCD in the Scheduling Section and progressed to become head of the section.

On his retirement Fred was presented with a pair of binoculars, subscribed for by friends and colleagues in the division of CAC which he had joined on its formation.



Fred Murton, CACD. (C)

Peter Reid of ISD has retired together with his wife Winnie, who worked in ATE Service and Repair.

Peter began his working life with Short Bros. in Belfast and in 1938 came to the Seaplane Works at Rochester remaining there until the whole company moved to Belfast and the works were closed. He tried his hand working abroad, with Auro Aircraft in Milton, Canada. In 1960 he returned to England and joined Elliott Bros. in the Design Office of MAC, becoming part of ISD when that division was formed in 1970, it was from this division that he retired.



Mr. Peter Reid, ISD. (D)

25 YEARS' SERVICE

During 1981, many people achieved the total of 25 years' service, among whom was **A. (Alec) W. Brown**, of FCD.

A native of Margate, he attended Chatham House School, Ramsgate, before being evacuated to Stafford during the war and attending King Edward VI School there. He joined the RAF as an Air Radar Fitter, serving for 8 years and becoming an Instructor of Apprentices.

On demobilization in 1956, Alec joined Elliott Bros. in Radio and Radar Division as a Development Engineer overhauling the Bendix VHF transmitters and receivers. He later moved to the DO to work on control panels for Bristol Britannia's. Alec is at present working on the Boeing 747 project.

He is married and lives at Westgate-on-Sea and has a daughter and son. He enjoys sports of all kinds and music, with a speciality for Mexican music. The selected gift of a clock was presented on behalf of the Company by Mr. Colin Pond. He celebrated his Silver Wedding Anniversary at the same time as his Service Silver Jubilee.



Alec Brown, FCD.



Party times

ADD held a fancy dress disco at Featherby Road clubhouse on 3 December 1981. Almost the whole Company turned up in fancy dress and added to the gaiety and fun of the occasion, enabling everyone to have a thoroughly good and happy time.

The winners of the fancy dress—Sharon McCawley and Kevin Munchin. (For any other photographs, see David Lucas int. 2616)



ATLANTA ACTIVITIES

All of us enjoy reading the issues of Marconi Avionics News which we receive at Marconi Avionics Inc. in Atlanta. We thought you might enjoy reading something about us—the people who make up MAV Inc.

Our offices are located in suburban North Atlanta. Manufacturing operations are located in one building; Engineering in another; Administration and Product Support in yet others. With these physical/geographic limitations, we felt that we simply did not see one another often enough to develop a feeling of 'one big happy family' working together. Thus, the Marconi Avionics Recreation and Social Club came to be.

The idea for a means by which our employees could meet in a social setting had been floating around for a number of years. The idea landed on 29 May, 1980 when the first official meeting of the Marconi Rec. Club was called to order! The fun had begun and it is still going strong. The hard-working committee members (elected each spring by all Rec. Club members) have presented us with a variety of activities during the past 18 months. Here are some of the highlights:

To 'spread the word' of our new organization, the first order of business was selling bright red T-shirts imprinted with MARCONI AVIONICS. Hundreds were sold to employees and their family members. Recently, lined windbreaker jackets with our own Recreation Club logo were sold. Now, summer or winter, the Marconi name is very visible in Atlanta.

The next order of business was to form a bowling league. The response was tremendous and the interest remains high. There are over 70 employees who bowl each Thursday night at lanes near our office. Those 70 bowlers—plus many additional employees who stop in to cheer their favorite teams—have a great evening. Last year's league ended with a gala banquet. Plans are already under way for a similar affair this spring.

Our next adventure was a 'Marconi Night at Six Flags.' Six Flags is an amusement park west of Atlanta. The park was closed to the general public so lines for the major attractions remained short. Dinner was served to over 150 Marconi employees and guests. Many local merchants donated terrific gifts for prizes that were awarded to more than 20 lucky individuals. The Recreation Club also provides tickets to Six Flags for use throughout the year. These tickets can be purchased at a substantial discount.

One of the highlights of our first year has to be the 1981 Christmas party. Though you will be reading this article in 1982, as it is being written we are all eagerly awaiting this year's Christmas party. Colorful posters (including the scrumptious menu!) have each of us humming Christmas carols and looking forward to seeing Santa who, of course, will be attending the party.

From the winter of '80 through the summer of '81, many more activities took place—a Valentine's day party, the successful season of our own softball team, a summer picnic for members and their families, and a very successful flea market where many employees sold and traded their 'priceless junkie'.

That brings us to the fall of '81—a really busy and fun time for all of us. First, 50 members of the Rec. Club made the trek to downtown Atlanta on a beautiful fall Sunday afternoon to see our own Atlanta Falcons in a hard fought down-to-the-wire finish football game. (That's American football—as you may know, we call your brand of football soccer.) What an exciting afternoon! Though we lost the game, everyone had a great time and we'll be back next fall cheering again.

And what can I say about our Halloween party that can't be said far better by some of the photographs accompanying this article? Everyone in attendance enjoyed the food, the company and of course the zany costumes. The judges had a rough time deciding the winners for best costume prizes.

Our Rec. Club is now 225 members strong. We've come a long way from that first idea! Our committee has provided excellent activities for us to enjoy and will continue to do so.

We appreciate the opportunity to share some of our activities with you. Happy New Year to All!



The Rec. Club Committee—hard at work deciding on a new activity. Karen Asher, Jim Ernst, June Skillings, Karen Goff, Ron Cook, Faye Leonard, Mike Davis, Doug Galtner.



George Pendry—sampling some of the excellent food at the Halloween party.



As Flawless Flossie, Dorothy Blandshaw (right) captured the best costume prize. Her doting friend is Dave Asher.



Bill Henning and his wife Tammi were our 3rd place prize winners. Don't they make a great Raggedy Ann and Andy?

FOR INFORMATION AND INTEREST

Day trip to **OSTEND** and **BRUGES**
Saturday 20 March £9.95

Four day trip to
FLORIADE (Brussels)
and **AMSTERDAM**
Spring Bank holiday weekend
Leave 28 May Approx. £50

Ten day coach holiday, half board
SEEFELD (Austria)
Leave 30 April £101
(Inc. Ins.)

Fourteen day coach holiday
full board
LLORET DE MAR
Leave 26 September £128
(Inc. Ins.)

For further information on the above please contact Rod Cole (2797) as soon as possible



George Pendry and All Harrison seemed to like Paul and Tricia Jeffs' costumes.



No, this isn't a poor worked-to-death employee—just Karen Asher at the Halloween party.

The following apprentices have completed their Agreements and have been allocated to the respective divisions.

A. Cooper	IND	Inspection
P. Doney	PSD	Q/A
R.W. Campe	COD	Mech/Standards
K. Rye	CMS	Inspection

We welcome into the Marconi Avionics family, the 1982 intake of apprentices. Their names, together with the schools they came from are listed below, and we wish them a very happy and successful period of training and a long and useful career. We note, with pleasure, that once again we have five females taking up the course.

Warren Wood (Boys)

A. Bell
N. Brunt
R. Cooper
M. Ellis
B. Folk
G. Whitcombe

Rede Secondary

B. Forrester
M. McNalty

Sir William Nottidge

I. Pestell

Maidstone School for Boys

D. Hancock
K. Hann
M. Mitchell

Thamesview

M. Oseman

Mid Kent College

S. Ahluwalia (Miss)

Borden Grammar

P. Neaves
S. Western

APPRENTICE ACTIVITY

Highfield Secondary

S. Cooper
D. Elphick (Miss)

Woodlands

P. Cuckow
R. Elliott
Allun Thomas
A. Williams

Sheppey Comprehensive

D. Benham (Miss)
I. May
Andrew Thomas

Cornwallis

A. Bristow
P. Cooper
D. Green
J. Gunner

Meopham Secondary

T. Slough

Westlands High School

R. Skinner

Chatham South Secondary

N. Jones
R. Paterson
C. Porter

Aylesford School

A. Moy
S. Simpson

Fort Luton

A. Read
D. Stephenson
D. Peek

Walderslade Secondary

Boy's School

I. Atkins
N. Beattie
M. Fowle
S. Laker
A. Moore
S. Robb
M. Rudd
D. Elliott

Temple Secondary

I. Campbell

St. John Fisher

P. Cook
S. Drayton
W. Humber
D. Smith
H. Staff

Faversham County Secondary

N. Fertiman
L. Orritt

Gillingham Technical

D. Hales
S. Malone
S. Osborne

Vinters

C. Bowman
G. Fridd
I. Shortland
S. Vella

Howard

C. Ford
J. Hill
P. Watts

Sir Joseph Williamsons Mathematical School

C. Asprey
J. Elliott
P. Thompson

Longfield Secondary

M. Caiger

Chatham Technical Boys

M. Colton
M. Conn
C. Dennis
P. Willmott

Rainham Secondary Girls

D. Ellis (Miss)

Hundred of Hoo

A. Southby
M. Stotter

Queen Elizabeth's School, Faversham

W. Moore

Warren Wood (Girls)

D. Thompson (Miss)



Annual Carol Service

The photographs show sections of the congregation who braved the winter weather to join in singing the time-honoured carols at Gillingham Baptist Church.



Elliott Concert brass Band, under Ian Walton, leading the carols.



The Editor would like information on the young boy - top left.



