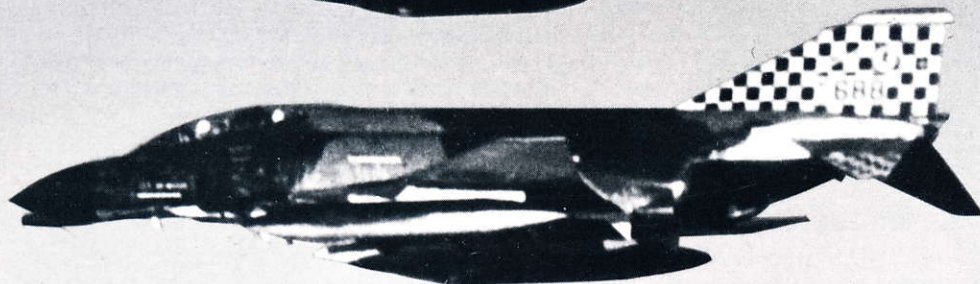
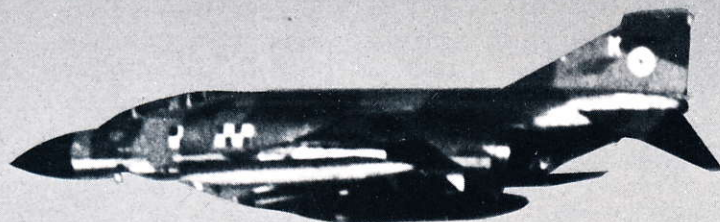


OCTOBER 1980

**Marconi
Radar**

ECHO

The internal newspaper of Marconi Radar Systems



UKADGE

see centre pages

ECHO

EDITORIAL

Extending our scope

We have made an innovation in this month's ECHO by devoting the centre two pages to a current item of news and interest.

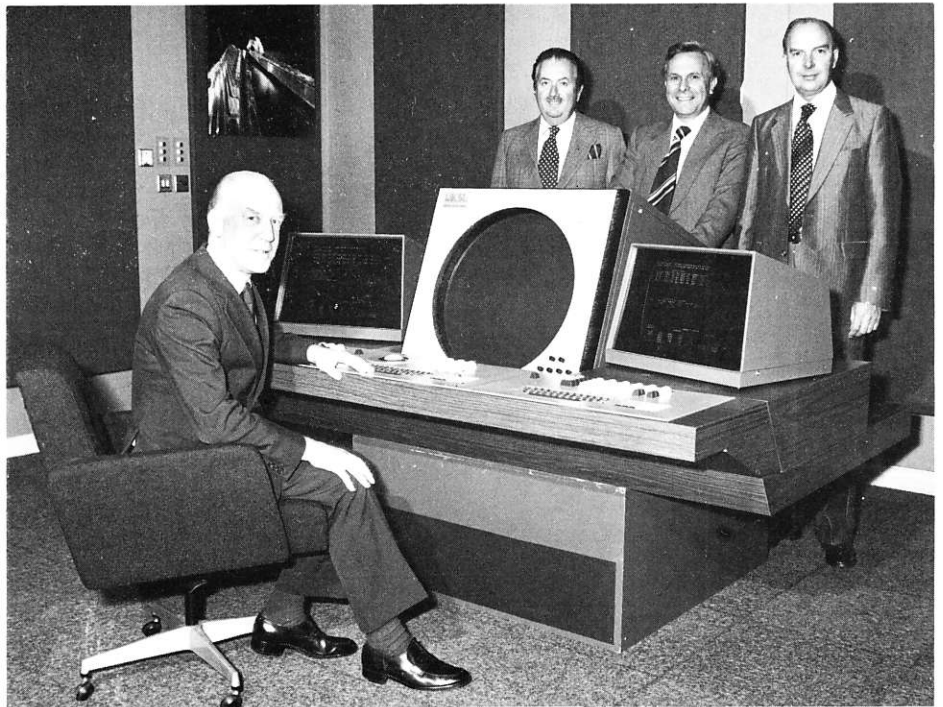
I have been talking lately to groups of Marconi Radar people at all our sites and there does seem to be a general interest in extending the scope of ECHO to cover more specific information about the Company, how things are going, and what makes the Company 'tick'. People are still interested in the social news, in visitors, in seeing how their colleagues work and so on, but I feel sure that more positive 'hard news' would be appreciated.

I am delighted that the first issue in the new style should feature UKADGE — Mrs Thatcher said in her speech at an important dinner on the day we were selected to do the UKADGE Project —

'Today has brought more good news. Marconi and Plessey, in association with Hughes of America have won the major NATO contract worth about £100 million to supply the complex improvements to the UK air defence ground environment. This is another fine example of a British led consortium competing with the best in the world and winning. I congratulate the firms concerned.'

In future issues we hope to tell you more about the Company's structure, about the money in the business and accountability, about costing and pricing, about marketing and product policy, about development and production, about being competitive, and to give you some of the salient figures of the Company's performance.

JOHN SUTHERLAND
Managing Director



Smiles all round from (left to right) Ted Sismore, Air Defence Adviser; John Crispin, Sales Manager, Military and Airspace Division (UK); Ian Whitlock, Technical Manager, Military and Airspace Division (UK); and Dennis Moyce, Business Manager, Divisional Group 'A'. John Lawrence, Project Manager UKADGE, was absent on leave when the picture was taken.

TWO YEARS OF EFFORT

THE MOD invitation to tender for UKADGE was issued in March 1979, and from then on over 100 employees from many departments at Chelmsford and Gateshead were engaged at various times on the preparation of the tender which was submitted on 1st May this year. From then until the announcement during Farnborough that our bid had proved successful, the MOD were actively evaluating our tender with those of our competitors.

We will now enter into detailed negotiations over the terms and conditions of a contract which is not expected to be placed until the end of the year. This will represent nearly two years of concentrated effort, involving many people and costing a considerable amount of money.

Included in the departments from which contributions to our offer came

are: Marketing/Sales, Systems Design Group, Installation Design Group, Pricing Services, Development Division, Production/Estimating (Chelmsford and Gateshead), Data Systems Division, Spares and Repairs, Field Services, Technical Services, Quality, Establishments, Technical Information Services, Registry and Publicity. Support also came from Marconi College and Central Reprographic Services.

Read all about
UKADGE
on our
centre pages

**FRONT
COVER
PICTURE...**

... two U.S.A.F. Phantoms join with a Phantom of No. 43 Squadron, R.A.F., in intercepting a Russian "Bear" at 30,000 feet.

Photo: MOD via Defence Magazine

More radars for Royal Navy



ABOVE: this view of HMS Sheffield clearly shows the two radomes housing the Type 909 (Sea Dart) tracker radars.

BELOW: Charlie Martin and Ian Forster carrying out a GWS25 tracker trial at HMS Collingwood, Portsmouth.

TWO major orders for naval missile radars have been placed with the Company. The Royal Navy is purchasing a further batch of Type 909 radars and has placed its fifth production order for radars for the GWS25/Seawolf anti-missile system.

Installed in pairs aboard Type 42 Destroyers and Command Cruisers, the 909 radar is specifically designed as the tracker/illuminator radar for the Royal Navy's Sea Dart missile, which provides fleet defence against missiles, aircraft and surface attack. It can also be used for gun fire direction.

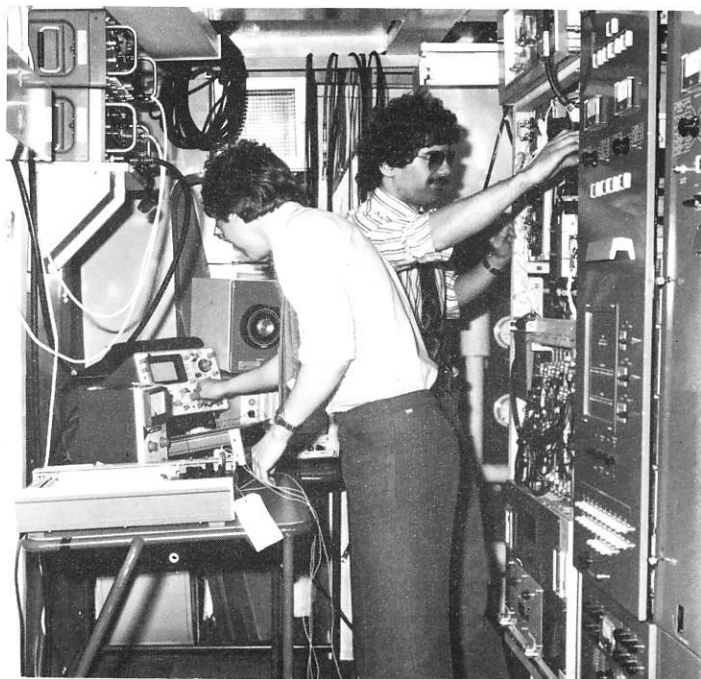
The Company is continuing further to improve the performance of the Type 909, and the development of a smaller version for use with the lightweight Sea Dart system, based on the privately-funded S800 series, is well advanced.

GWS25/Seawolf, for which we are the prime contractor for the

overall ship system, is the world's only proven anti-missile system for point defence of naval vessels. It is designed to give ships of frigate size and over an effective means of defending themselves against missiles, including sea skimmers, and close air and surface threats.

Following extensive trials in the Leander-class frigate HMS Penelope, during which it was proved that the system is effective against high and low level attack, GWS25/Seawolf is now undergoing ship acceptance trials aboard the Type 22 (first-of-class) frigate HMS Broadsword. The next Type 22 frigate, HMS Battleaxe, has also been fitted and is about to undergo acceptance trials.

Development of improvements to GWS25/Seawolf continues, and evaluation trials are being carried out using millimetric radar in place of the television system to further enhance the system's low-level capability.



Navy buys IVR-Met

IVR-Met, the visibility and weather monitoring system developed by Control and Simulation Division, is to be installed at four Royal Naval Air Stations in the U.K. under a recent contract worth almost £400,000.

RNAS Yeovilton and RNAS Culdrose are each to receive a three field-site configuration, RNAS Lea-on-Solent a two field-site system, and RNAS Portland one field site.

The Marconi IVR-Met system is capable of collecting and processing data from other meteorological sensors

besides visibility. These sensors can monitor background luminance, wind speed, wind direction, air humidity, air temperature, atmospheric pressure and cloud base.

At the heart of the system is the transmissometer, called MET-1, which has been bought by the US Federal Aviation Authority and the UK Meteorological office. The Royal Aircraft Establishment has also procured three MET-1 instruments for further research into vertical fog structures.

SCATCC to be extended

THE Company is to extend the Scottish Air Traffic Control Centre for the Civil Aviation Authority with more data processors and displays.

The new ATC Centre at Prestwick became operational early this year. Since opening, the Centre - which monitors aircraft in Northern England, the Atlantic Approaches and the North Sea, including Scotland - has operated a very advanced radar data processing and display system supplied by Marconi Radar.

The new well-established and versatile Locus 16 distributed processing technique has proved itself eminently suitable for air traffic control and many other complex civil and military data handling systems.



Inside the Scottish Air Traffic Control Centre at Prestwick.

Lightweight Sea Dart

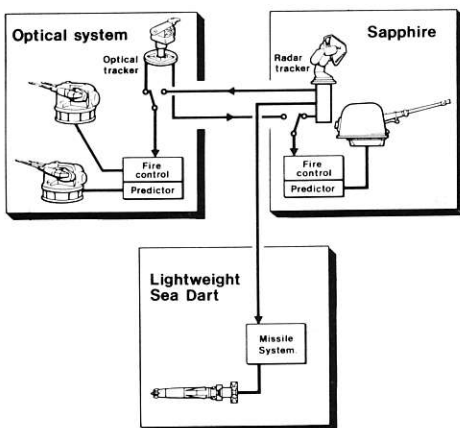
ELSEWHERE in this issue we announce that the Company has received orders from the Royal Navy for more Type 909 tracking and illuminating radars. The GWS 30/Sea Dart weapon control system, which includes the radars, is fitted in Type 42 destroyers and in the Type 82 and Invincible class cruisers.

A new system has now been designed, based upon proven components of GWS 30, which is suitable for fitting in smaller ships with displacements down to 300 tons. The system, known as Lightweight Sea Dart, uses Marconi Radar control and the British Aerospace Sea Dart missile, together with a new lightweight launcher and support electronics. The Marconi/Sperry Sapphire tracking and weapon control system gives a compact, lightweight missile control channel.

Two radar director options, both of which are also suitable for the control of medium calibre and fast-firing guns, are available to meet the needs of either Fast Strike Craft down to 300 tons (ST804 director) or Light Frigates and larger ships (ST805 director).



The ST805 Radar Tracker.



Typical small ship's weapon system

On show at Wiesbaden

THE Company was well represented at the Military Electronics Defence Expo, held at Wiesbaden, Germany, earlier this month.

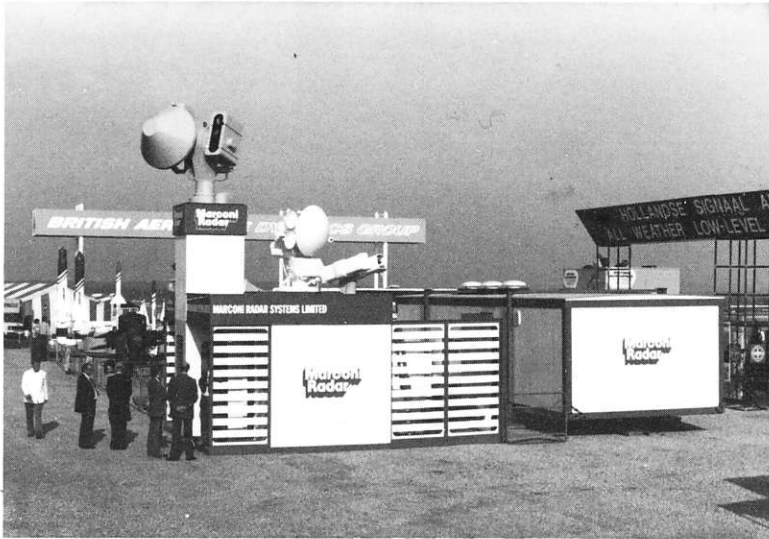
Highlighted this year was Control and Simulation Division's IVR-Met, a visibility and weather monitoring system which has many defence applications, e.g. on airfields, helicopter pads and ships.

Other items of hardware on show included SFCS600 fire control equipment for tanks and light armoured vehicles, and automatic level compensation (plane conversion) equipment for retrofitting self-propelled guns and other artillery weapons. There was also a pictorial display showing other aspects of Marconi Radar's defence capability.

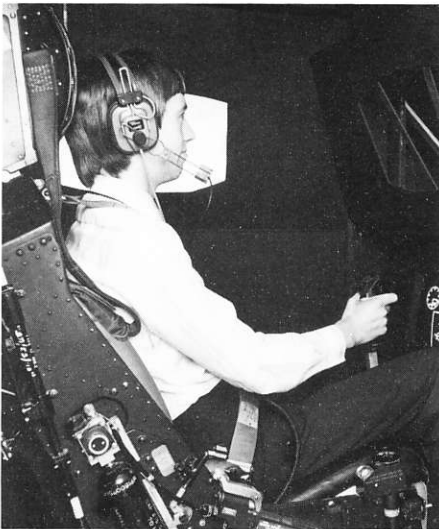


Commander's Control Panel for our SFCS600 tank fire control system.

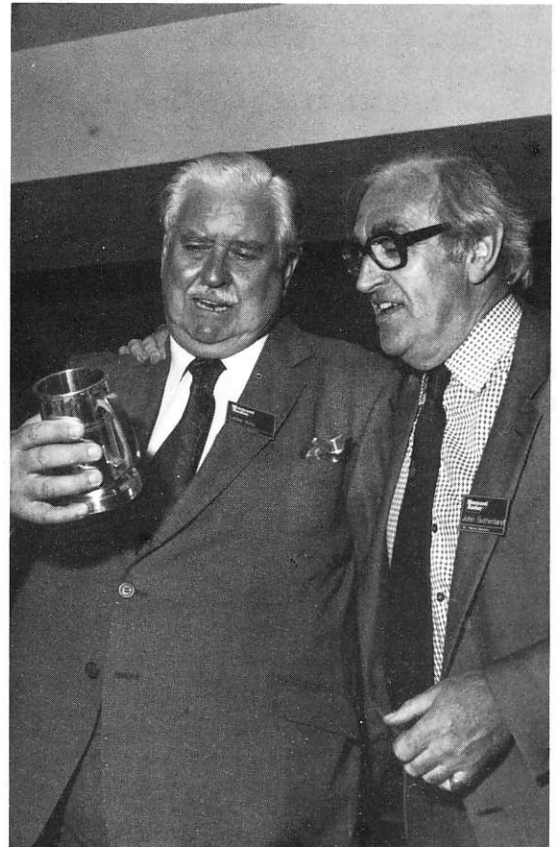
PICTURES FROM FARNBOROUGH



ABOVE: outside the Hall at Farnborough the Company's ST805 director for the Lightweight Sea Dart missile system can be seen, together with a display and data handling container and, on the right, the Portakabin for the cockpit simulator.



LEFT: Mike Shenton, one of the Tepigen development team at New Parks, at the "business end" of the aircraft cockpit simulator.

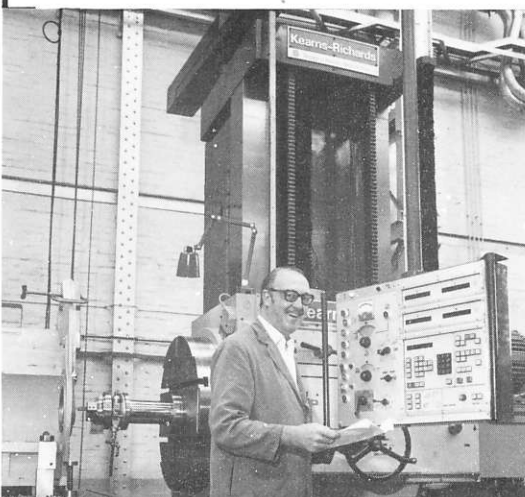


Well done, Leslie!

For the last 18 Farnborough Air Shows, over a period of 21 years, the familiar figure of Les King, of Sales Department, Writtle Road, has looked after the complex details of administration for the Company.

This year's Farnborough was Les's last, for he retires in a few months' time, and John Sutherland is shown here presenting him with a pewter tankard in appreciation of his efforts over the years.

Learning the new technology



Nice one, Arthur!

WITH the advent of the 80's the age of the silicon chip and micro-processor is now very much with us, and a direct result of this is the increasing use of computer numerical controlled (CNC) machines in the manufacturing industry. Our picture shows Arthur Lenton operating one of these new machines at Blackbird Road.

Arthur is a good example of how Blackbird Road's workforce is adapting to the use of the latest manufacturing technology, for he proves how modern machine-operating techniques can be readily learned when the transition from conventional manual controlled to CNC machines takes place.

After 21 years of operating a conventional Forge de Gilly horizontal boring machine, Arthur has now adapted to the skills and demands required by the new Kearns-Richards CNC horizontal boring machine which has replaced the Gilly. And so a technological gap of a quarter of a century has been spanned by a short period of training in the concept and operation of the new system.

In the words of Arthur, who retires in 15 months time: "I can't imagine anyone buying an old manual machine — this type of machine control is here to stay!"

He is now helping to train a young man, Bob Musgrave, who will shortly operate the machine on the night shift.

THE main air threat to the UK in the foreseeable future will consist of increasing numbers of high-speed aircraft fitted with modern ECM equipment, able to operate at high or low levels and to approach the UK from any direction.

To meet this growing threat, the UK air defences require improved air-space surveillance, weapon systems, and command and control facilities. New ground radars and the Nimrod AEW aircraft will provide the improved surveillance, the Tornado F2 interceptors and surface-to-air missiles will provide weapons, and the Improved UKADGE will provide the essential new command and control capability.

The UKSL design is a complex system which, in terms of capability and flexibility, will be in advance of any other system in the world. For the next decade it will set the standard for ADGE improvements within the rest of NATO and the West.

WHAT IS IT?

This is a project to replace the existing 'Command and Control' system for Air Defence in UK. It is a highly computerised system to accept information from radar and other sources - including the Nimrod airborne early warning radar - covering the sky over an area of four million square miles over and around the British Isles. The information will give the position of every aircraft, which can then be processed and stored, ready to be fed out again and used in the defence of Britain. A complete picture of all air activity will be built up, and made available at a number of different centres so that fighters or missiles can be directed and controlled to intercept and destroy the intruders. Speed is the essence of the system; with high speed aircraft, decisions must be made and actions taken almost instantaneously.

*Pictured right: An air defence operator at a UKSL console.
Inset: A Royal Navy Phantom intercepts a Russian 'Bear'.*

UKA

UNITED KINGDOM AIR DEFENCE



UKADGE

CONTROL GROUND ENVIRONMENT



WHO WILL CARRY OUT UKADGE?

We have formed a special Company called UKSL - 'UKADGE Systems Limited' - to bid for this business in competition with a strong grouping led by the American Company Westinghouse. UKSL is owned one-third each by Marconi, Plessey and Hughes Aircraft Company of California.

UKSL has been told that it has been selected to carry out UKADGE and a contract will be finalised by the end of the year.

WHO DOES WHAT?

UKSL itself has a central staff and acts as prime contractor for the project. It will specify and define the overall system, co-ordinate the work of the three members and generally manage the project.

Marconi, Plessey and Hughes will provide the hardware and software necessary to complete the task.

WHAT'S IN IT FOR MARCONI?

Our subcontract from UKSL will be worth about 25 million pounds and we also have a third share in the UKSL activity. Our subcontract consists of the design and production of a large number of Universal Display Consoles, each fitted with data processing facilities on the Marconi Radar LOCUS 16, together with the associated computer programming (or 'software'). We also do the voice communication switching system.

This will mean production work for the Chelmsford and Gateshead factories, and considerable system engineering, computer programming and design work in Chelmsford. The viewing unit which goes into our console will be made by Plessey and the big central data processing system is Hughes' responsibility.

84 years' service!

Maurice Dare (left) and George Mitchell (right), who recently retired from the Company on the same day, share more than 84 years' service between them. They are pictured with their wives at the presentation made to them by Managing Director John Sutherland.

Maurice joined the English Electric Company in 1938 as a draughtsman in the Switchgear D.O. In 1940 he transferred to the Nelson Research Laboratories, working for Mr. J.K. Brown, where his activities were mainly concerned with building and site work but also became involved with working on the first welded army tank. In 1950 he moved to the Marconi Company at Baddow, working on AMES II transmitter with Mr. W.F. Presland. He then worked on Linesman for practically the whole of the development cycle, being based at New Street for a short time, and was appointed Section Leader in the D.O. He transferred to Technical Services D.O., and from then until his retirement worked on a wide



range of PV and Ministry equipments.

George joined the Receiver Section D.O. of the Marconi Wireless Telegraph Company in 1937. He transferred to the Marine D.O. in

1939, to Tool Designs in 1940 and to Receiver D.O. at Baddow in 1941. In 1949 he moved to Radar D.O., first at New Street then at Broomfield on VAST-ROTOR. He was made Mechanical Designer in 1952. Over the next few years he was with Airborne D.O. at Writtle, with Marconi Marine Special Products Division in charge of S.R.E. D.O., Deputy Chief Draughtsman in new Marine building at Widford, and Deputy D.O. Manager Automation D.O., Marrable House, Baddow, until it was disbanded. In 1970 he was in charge of transferring Elliott-Auto drawings from Borehamwood to Chelmsford, in 1972 was Section Leader P.D.S. D.O. at Baddow, and from May 1973 was Mechanical Designer Radar D.O., mainly on GWS25, then S700 and finally A.E.W.

George who has four married children, describes himself as having 11½ grandchildren. By the time this appears in print, the latter figure will presumably be about 11¾!



Tony Dix

Tony Dix (left), who joined Services Equipment Division under the late Colonel E.N. Elford in 1950, was presented with a wallet and cheque by Peter Way, Assistant Managing Director, on his retirement.

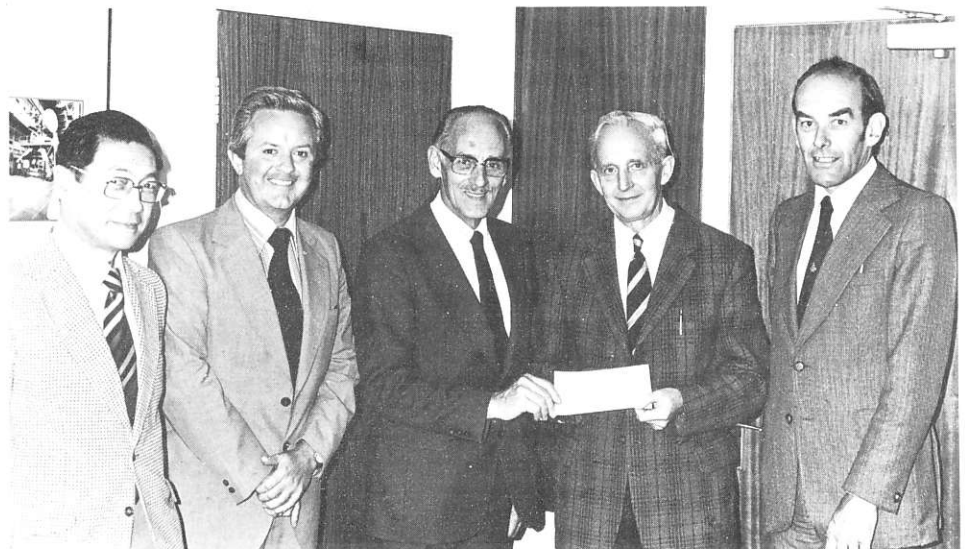
Tony worked with the late Mike Wolf at New Street on Ministry of Defence "Vast and Rotor" and "Locking" contracts, before moving to Systems Engineering under Bill Quill dealing with PV equipments. In 1958 he was at Church Green, Broomfield, with Peter Max and Don Eastaugh.

He was a member of the site survey team at Ash in Kent employing S264 surveillance radar for SATC. Systems work included S264 installations for Teheran, Zurich, Jersey and Filton airports. Tony joined Standards Authority at Baddow in 1975. He is vice-president of the Chelmsford Amateur Radio Society.

Another award for Cyril

Cyril Robinson of Blackbird Road, who had already received an award of £50 from his local Suggestions Committee, has now been presented with a further award of £200 made by the Company's Main Suggestions and Inventions Committee. Cyril's invention is a special-purpose machine for checking the insulation properties of enamel copper wire prior to winding — a task that previously could only be completed after assembly.

Pictured here at the presentation (left to right) are Pat Power, Chief Test Engineer; Ken Merricks, Planning and Development Manager; Owen Jones, Works Manager; Cyril Robinson; and Martin Bennett, Manager Test and Inspection.





Ambulances dedicated

THE Marconi Division of St. John Ambulance are delighted to have received their new 'W' registration ambulance, and on September 2 a service of dedication was held at New Street works. At the same time their other three ambulances were also dedicated.

The new ambulance has been bought by GEC-Marconi Electronics for use by the Marconi St. John Division during the day for their Company first-aid and transport work, and at the evenings and weekends for their voluntary first aid service.

The equipment for use with the new ambulance was bought jointly by Marconi and the St. John Ambulance. It includes an orthopaedic 'Scoop Stretcher', Entonax pain relieving gas equipment, and Minuteman resuscitator and two-way radio.

The dedication service was conducted by

Rev. J. Ponter, Vicar of St. John's, Moulsham, Chelmsford, and Industrial Chaplain to Marconi. The fleet of ambulances was offered for acceptance for the work of the St. John Ambulance Brigade by Marconi St. John's Divisional Superintendent Peter Weathersby, who is an engineer programmer in software at Writtle Road, and was accepted by the Presiding Officer, Dr. K.W. Nichols-Palmer, the Commander of St. John in Essex.

The Marconi St. John Division is the best equipped division in the Western Area of Essex and maintains a high standard of equipment and training.

Membership is not restricted to Marconi employees, and the Division is now seeking more people with spare time at weekends to train as first-aiders and ambulance drivers.

CHRISTIAN FELLOWSHIP

DURING the past two months most people in the Chelmsford area will have seen the slogan 'Meet Jesus', and some will have been present at meetings held at the Writtle Road Works mentioned in the last issue of 'ECHO'. Following on from this, each Monday in November and part of December we will be considering together what it means to be a Christian, and the place that Jesus Christ has in our world today. A welcome to all at 1-35 in 'D' Bldg. Reception.

A Carol Service for local industry will be held in St. Mary's Church, Widford, on 16th December at 12.30p.m.

JON ELLIS,
Chairman

Near-miss for Jack on 'Mastermind'

MANY Echo readers must have been amongst the 10 million or so television viewers who saw Dr. Jack Smith, of radar development division at New Parks, put up a very creditable show on BBC TV's 'Mastermind' recently.

The programme had been recorded at Nottingham University a few weeks previously, with Magnus Magnusson as question master as usual, and was transmitted on Sunday, September 14.

Jack took Radar as his specialist subject, naturally enough, and together with his General Knowledge section scored a total of 20 points — resulting in a triple tie for first place with two other competitors.

Unfortunately one of his answers was then



investigated and after much discussion ruled against by the producer, which meant that Jack's score was reduced by one, putting him

into third place. The winner was decided on the number of 'passes'.

"I was disappointed, of course," says Jack, "but mainly relieved to escape without emerging as the complete idiot exhibitionist!"

"It was certainly an experience. For instance, there was the doom-laden music and the famous black chair, actually very ordinary-looking, getting rather scuffed round the edges from its travels, but very comfortable. We also found that the catwalk wasn't quite steady — it had a nasty little step we were all afraid of tripping over.

"When it was all over, the best advice I was given was to enjoy the supper afterwards. We certainly did that!"

Gateshead news



● Works Manager Bill Henderson recently presented awards to Apprentices of the Year at Gateshead. Pictured here after the ceremony are (left to right) Peter Scott (third year), Billy Whitfield (fourth year), Mr. Henderson, and Ian Clark (second year).



● Tommy Doneghan retired from the Progress section at Gateshead and Oddie McClurry presented him with a 'Sunburst' clock to mark the occasion.



● Bob McLaughlin retired from the Estimating Department at Gateshead and was presented with a set of garden tools to help occupy his time, and a bottle to refresh him when the job is done. John Nevin, Chief Estimator, made the presentation.



● Joseph McBride recently retired from his job in Section 011 at Gateshead Works and was presented with a cheque to mark the occasion.



● Some of the Gateshead retired employees enjoying a meal on their annual Summer Outing. A total of 48 people were taken by coach to Rothbury, stopping for refreshments on the way, had a meal at Rothbury and again stopped for a drink on the return journey.



George does it again

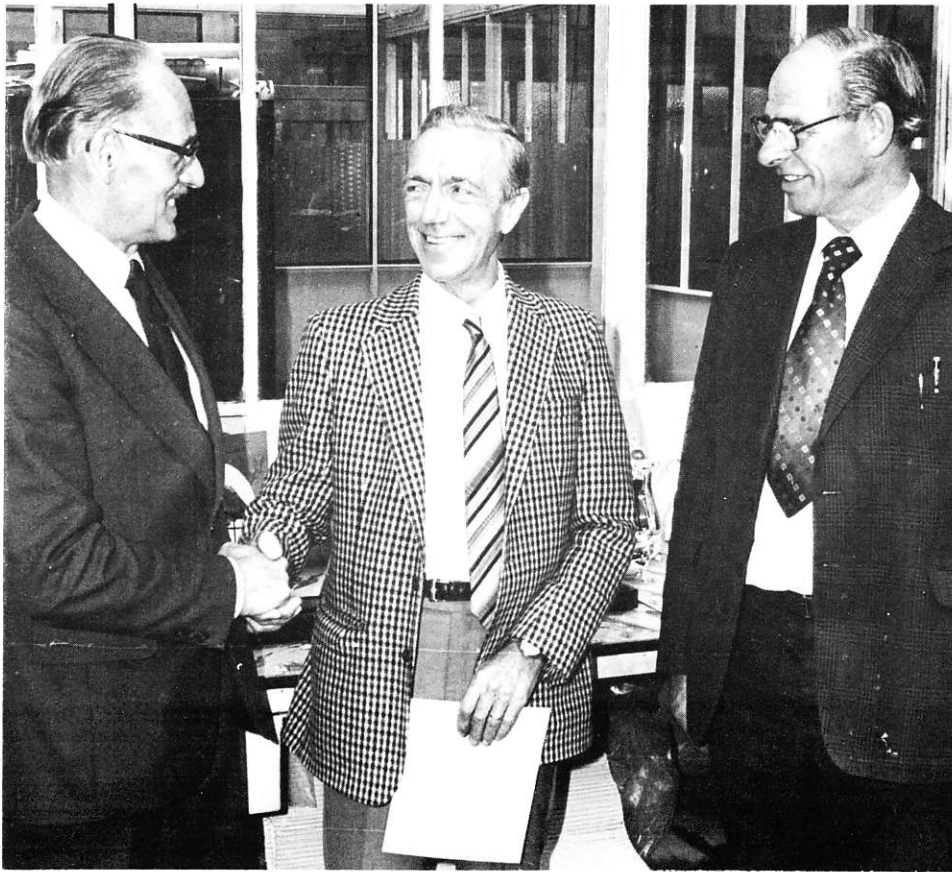
THE 24th annual show of flowers, fruit, vegetables and wine, presented by the Leicester Ex-Service Association and Social Club at Blackbird Road, attracted a total of 392 entries.

The show is open to all GEC, Marconi, and Fisher Controls employees at Leicester, and to their families and associate members of the Social Club.

This year's winner of the Open Challenge Cup, for the third year in succession, was retired employee George Smith, who gained most points in the show. The Gilling Challenge Cup, an inter-departmental trophy for the department gaining most points, was won for the second year in succession by Mechanical Assembly of Blackbird Road.

Other winners were: Section 1 (Vegetable and Fruit) George Smith; Section 2 (Flowers) George Smith; Section 3 (Cookery and Home Crafts) Mrs. K. Mawby. In Section 4 (Wines), the W.O.P. Jones Trophy for the best wine in the show was won by Alan Dobbs, who also won the J. Burns trophy for the most points.

Picture shows (left to right): Alan Dobbs, Mick Clarke (Mechanical Assembly), Owen Jones (Works Manager), George Smith, Stan Heath (President Ex-Service Association) and Kath Mawby.



Bill's farewell

BILL Fellows, who joined the B.T.H. Company at Rugby in August 1936, has retired from the Blackbird Road factory after more than 44 years' service with the company.

Bill moved to Leicester in 1942 as a founder member of the Blackbird Road establishment to help set up the Plating Shop. He became Foreman of the shop in 1951, where he established five types of plating — the most important being silver, used for radio location aerials and Lechter lines. In 1953 the Plating Shop moved to its new site in Building 29, and eventually the number of plating types was increased to 15.

● Bill is pictured with Owen Jones, Works Manager (left) and Stan Heath, Manufacturing Manager. He was presented with a portable colour TV from the Company and a silver tea service from his colleagues. A special gift from his staff in the Plating Shop was a billiards cue.

Retired employees' association formed

RETIRED employees of the Company at New Parks and Blackbird Road, together with those of Fisher Controls, were invited to a meeting in the New Parks canteen last month to discuss the formation of a Retired Employees Association.

Our picture shows Pension Officer George Skipp (centre) chatting at the meeting with retired employees Denis Morphy of Marconi Radar (left) and Harold Smith of Fisher Controls.

The association has now been formed with the objective of establishing and maintaining a link between the Companies and their retired employees, and to make facilities available for social contact between current employees and those who have retired.

The management committee of the Sports and Social Club have kindly extended life membership to those who retired before the opening of the new clubhouse, which means, for example, that games facilities are now available to them.



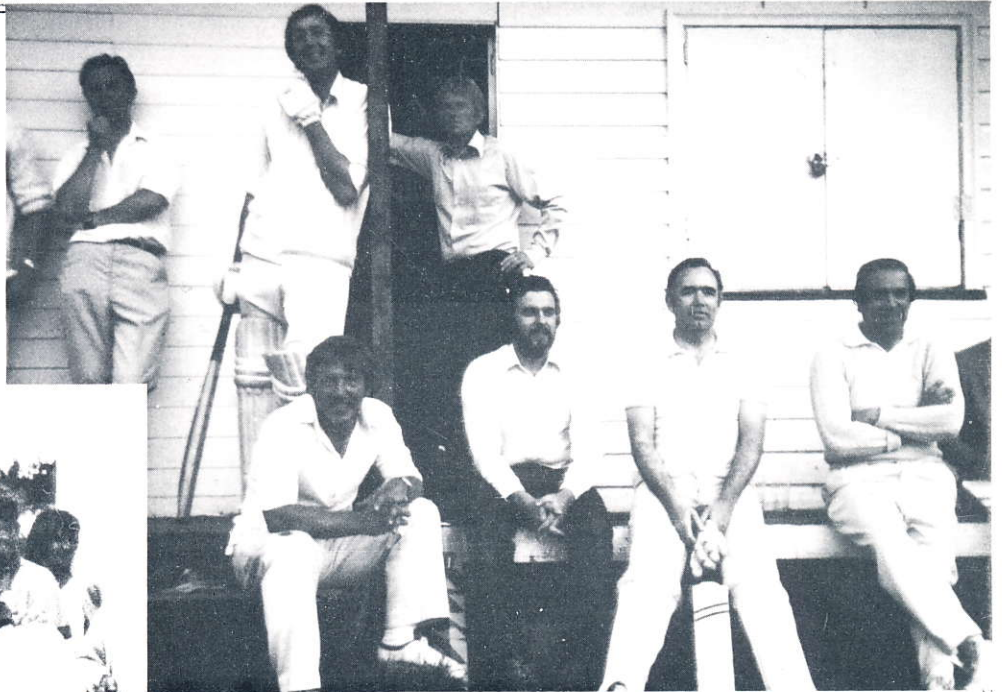
Happy couple

● Our congratulations to Doreen Cross and Peter Hincks, who are pictured here after their marriage at Leicester Register Office on September 6th. Both work at New Parks, where Doreen is Cashier and Peter is in the Radar D.O.



Members and supporters of the victorious New Parks team pictured here include (from left) Joe Miller, Malcolm Smith, Trevor Vernon, Nick Donovan, Dave Miller and Bob James.

Pictured below: with the shades of night falling fast, Bob James waves the trophy aloft after receiving it from Pete Burgess.



Cricket champs

This year's tussle at the rural Leicestershire village of Barsby between New Parks and Blackbird Road, the holders, for the annual cricket trophy ended in victory for New Parks — a not surprising result in view of the fact that over the last few seasons each team has won in turn!

Rumour has it that Blackbird Road, who won the toss and elected to bat, scored something in the region of 80 runs for nine wickets in their 16 overs — a total which New Parks knocked off for the loss

of four wickets. Each side was either aided or hindered, according to one's point of view, by umpires Roy Simons and Hugh Allen, whose interpretations of the rules were sometimes of the strangest.

Eventually Blackbird Road captain Peter Burgess presented the trophy to his opposite number Bob James, and players, officials and spectators then repaired to the local hostelry, where the evening's entertainment really began.



CHELMSFORD FOOTBALL

Marconi Inter-Departmental Football Competition

League positions to date

DIVISION I	P	W	D	L	F	A	Pts
Radar Commercial	4	4	0	0	20	4	8
C.T.A.	4	3	1	0	19	7	7
Marconi Marine 'A'	5	2	3	0	15	8	7
I.D.O.	4	2	1	1	6	5	5
Maintenance	5	2	1	2	9	15	5
Radar Software 'A'	3	1	2	0	3	3	4
M.A.T. Lab	5	1	2	2	9	15	4
E.E.V. 'A'	4	1	0	3	4	6	2
Supplies	5	0	2	3	9	13	2
Radar Appliances	5	0	0	5	3	21	0

DIVISION II	P	W	D	L	F	A	Pts
Marconi Marine 'B'	5	4	0	1	15	11	8
C.C.C.	4	3	1	0	17	4	7
Machine Shop	5	3	1	1	16	9	7
Hermes	5	3	0	2	16	7	6
E.E.V. Accounts	5	3	0	2	11	8	6
T.M.U.	5	2	1	2	15	9	5
Light Conversion	5	2	0	3	9	11	4
Radar Support	4	1	1	2	4	10	3
D.C.M.U. Widford	5	1	0	4	10	17	2
Radar Software 'B'	5	0	0	5	0	27	0

THE first session of the Inter-Departmental Football Competition has been completed and with favourable weather a full programme was almost assured.

Radar Commercial have reached the Semi-Finals of the "Jubilee Cup" and meet the Undergraduates team 'Hermes'. The winners play either Supplies Department MCSL, New Street, or the Central Training Area, New Street. Radar Commercial have come strong again this season and look good candidates for the Division I championship.

PHIL CHAMPION



"And then he said - 'If you've got any criticisms, don't be afraid to air them - .'"

Your Echo

News stories, photographs or other items of interest concerning the Company and its people are always welcome for possible publication in 'ECHO'. Copy date for next (Christmas) issue is December 3.

Your contact is Arnold Smith, Editor ECHO, MRSL, New Parks, Leicester. Tel: (0533) 871481, Ext. 60, Int. 577. Or at Writtle Road material may be handed to Christine Merrill, Assistant Publicity Officer.