

Echo

The internal newspaper of Marconi Radar Systems and its people

A JUMP AHEAD

A radar display incorporating the use of colour to simplify operation, pioneered by MRSL engineers, has now reached the stage of pilot production and is being evaluated by ASWE. MRSL is one of the first of the few companies in the world to have delivered a colour display.

In the new range of sixteen-inch PPI displays, both black and white and colour, the main feature is speed. The full diameter transition time of the new equipment is six to seven times faster than its predecessors. This makes operation appreciably faster, and more information can be displayed. Now there is additional use of colour for marking aircraft identity and recording the categories of working information, as presented by the operations computer. This assists the operator in his extremely responsible task of clarifying the operational position with utmost speed.

This new method of handling information can also be applied to civil air routes, and other problems such as road traffic.

The black and white colour displays are built from similar components on a modular system which gives compactness. The complete unit measures only 18 x 18 x 26½ inches, and it includes a universal power unit which can be programmed to give two separate outputs of 5 to 30 volts in 1 volt steps up to 10 amps simultaneously. The colour display has a cathode ray tube of the Penetron type; the unit for ASWE has a special back-up to drive it, and the picture of it, with engineers responsible for it, was taken at Baddow as soon as testing was complete.



Chelmsford's dance

Over three hundred Marconi Radar Systems people attended the Company's annual dance at the MASC, Chelmsford; a most enjoyable evening. J. W. Sutherland, Managing Director, was also present, and in the picture, top right, is Mrs. Sutherland dancing with Ian Donaldson, Technical Manager. The MC was Les King who has organized the dance with great success for ten years running.

The Forge project (below)

The new computer based display and data handling system 'Forge' is another advance in civil and military air traffic control. With the displays here are Mike Lewis, left, Forge development project leader and Jack Wild, Manager, Engineering B, who, together, gave a lecture on ATC digital radar handling and display techniques to the IERE and IEE at the Civic Centre.



New colour radar display

The new sixteen-inch PPI colour display for ASWE, left, and a black and white unit, with the MRSL Engineering B team responsible for them. Left to right: back row, Chris Lodge, Bob Todd, Andy Emberton, Graham Peel, Section Leader; Les Dawson, Consultant engineer. Front, sitting: John Whittaker and George Matthews.



Painful decisions

As you will be already aware, we have had to take the painful step of announcing that there will be a number of redundancies in Marconi Radar Systems Limited.

The announcement was made at the earliest possible date, several months before the first individuals will be given notice; we will always try to give news—good or bad—as soon as we can.

State of affairs

Several reasons lie behind the necessity to reduce our total numbers; as I said in the last *Echo*, world trade has been far from buoyant and the recent intake of new orders has been at a considerably reduced level. There is also a slowing down of future business from the British Government in the fields of defence and air traffic control. Ironically, we are currently very heavily loaded in many areas of installation and development, and the numbers in field services and the design office have risen over the last year or two to a greater level than they have ever reached before. It looks as though we shall be unable to sustain this high level later in 1972. In the meantime, our performance on the present work must be of the highest order, to ensure continuity of current work and to secure the profitable new business necessary to support even the slightly lower effort we are predicting by the end of the year.

I am glad to be able to report that we have a couple of good orders almost "on the hook", but whilst this is encouraging, we shall undoubtedly fall short of our predicted orders in the financial year 1971/72.

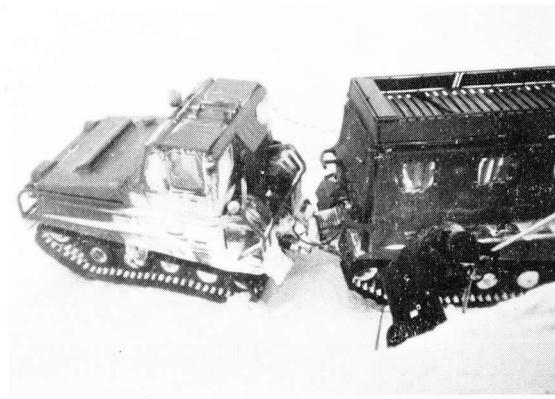
Cautious optimism

The unrelenting political lobbying which we have been carrying out for many months to secure more Government work, whilst it has not yielded any new contracts, may result in two fairly modest orders being brought forward in time. In the world market, however, there seem to be slight signs of recovery at last, and indeed we are at present pursuing a record level of enquiries.

The Government will, I am sure, play its part to help in our world sales effort, through diplomatic channels, through assisting in export financing, and not least by point blank refusal under any circumstances to buy any more defence or air traffic control equipment from our competitors overseas.

Looking to the future, I think we can face the new financial year with a degree of cautious optimism.

JOHN SUTHERLAND,
Managing Director



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Cat-climb on radar chain



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We have had a letter from Peter Driver of Field Services who is out in Norway where the long winter nights are now giving way to the long summer days.

He has sent some pictures of his site, one of those which form the Nato radar air defence chain, and says: 'This place is notorious for its weather and is used as a research site on the subject of icing. Photography is a chancy business, but we were lucky with these.'

SNOW-CAT

1. 'This vehicle is the snow-cat, at the site entrance. Normal access is by cable-car over the longest route in northern Europe. High winds make the use of the 'cat' necessary in winter at frequent intervals. The man coming up the ladder is Eric Eustice. Wind 65 knots, driven snow, temperature -15°C .

2. 'Here are Aidrian Kirk and Trevor Thomas on site. The wind is about 50 knots: temperature -17°C . (reasonable for the time of the year). The glare is the sun setting.

3. 'Preparations for a party given for the Norwegians by the Marconi site team. Right to left, Peter Driver, Carla Kirk, Tom Foster.

The pots contain spaghetti sauce to a secret recipe developed on a middle-east site—and is being inspected by the Site Engineer.

IN THE MESS

4. 'A corner of the Norwegian Air Force mess bar during the party. Right to left, Peter and Janet Driver, Trevor Thomas, Greta, Capt. Forseth (Site Commanding Officer RCAF).

5. 'The main street of Roros. Originally a copper mining town, now more a centre for tourists (hunting and fishing in summer, ski-ing in winter). The buildings are all timber and the small sleigh, sparky, in the centre is the normal winter transport of the area for all ages. It is driven like a scooter.

'The site team live in an hotel, about ten minutes drive to the cable-way, which is a 30-minute climb to site. The Air Force domestic site is next to the hotel and Marconi team members have free access to the mess.'

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In County competitions Marconi St. John Ambulance Brigade won team test, ambulance crew and uniform competitions.

Leicester radar for Singapore

Marconi Radar Systems, Leicester, is one of a group of contractors engaged on the re-furbishing and commissioning of a complete guided weapon system which has been acquired from the British Government by the Government of Singapore. Our part of the project covers the tracking radars originally manufactured in Leicester.

While all spares and parts required are being supplied from the UK the main work is being carried out on site. In order to meet the required standard it was necessary completely to strip down the radars, re-wire and re-furbish as necessary and incorporate new modifications. Many difficulties are being encountered such as those associated with high temperature and humidity and long lines of communication but, in spite of these, the work has progressed very satisfactorily and is in line with the original programme.

Second radar ready

The first equipment has been handed over fully commissioned to our customer. The work has been proceeding on the other equipments in parallel and by the time this is published the second radar, after having been re-furbished, will have been transported to a new site for re-erection and commissioning.

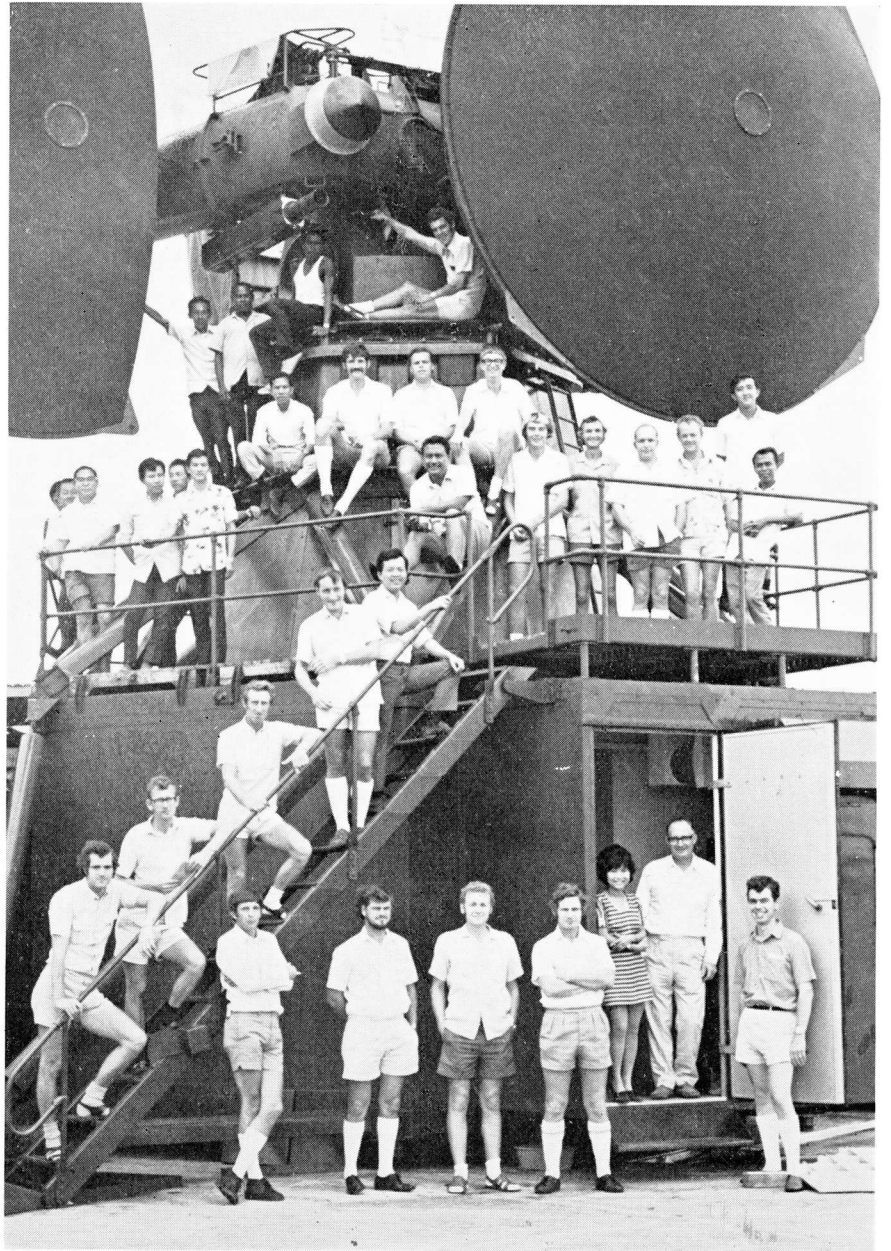
Of the team working on site about half are from the United Kingdom and half have been recruited locally. The Project Manager is Ed Buckland and the team is administered by P. J. Lewis, Manager, Installations and Maintenance Department, Leicester.

First hand-over

This picture was taken on the occasion of the hand-over of the first equipment, fully commissioned, to our customer in Singapore. It includes most of the team and the Site Manager, Brian Loader, is standing on the extreme right, in the foreground.

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Veterans—The reunion will be held on Saturday, 15 April, in New Street canteen. The President will be Mrs. D. E. Holder—the first lady President.



Talking about bikes

You would hardly think, when you first meet attractive Jill Spencer, that she would be fascinating to talk to about racing bikes.

In the office Jill is secretary to J. D. Crispin, Joint Sales Manager, and at home she is a secretary of a rather different kind.



She looks after the paperwork and is 'head cook and bottle washer' of her boy friend's racing motor cycle enterprise.

Her brother, Robert Spencer, boy friend Eric Fenner and Nigel Townsend are partners. They build racing motor cycles under the name of Stef Concepts, of Braintree, and prove their designs by riding them in pretty well all the big events—Brands Hatch, Crystal Palace, Lydden, Snetterton. Talking of the road-holding and racing qualities of a bike, Jill said that their new frame was based on triangulation. It gives better manoeuvrability: with it a rider can outbrake an opponent when entering a bend.

In the racing season the team are away most weekends in their van. Jill has helped them work all night on the bikes, before now, preparing for a race. The pace gets terrific. She is Eric's lap counter and timekeeper. She keeps her eye on him and two watches at the same time, and knows just what speed he is doing.

They will be racing again this summer, but just for a holiday she and Eric will be going to see the TT races in the Isle of Man.

Broadcasting link

Jillian and brother Robert are, of course, son and daughter of R. T. C. Spencer of Transmitter Sales, Broadcasting Div. MCSL.

Mayor elect

Les King of MRSL marketing organization, below left, has been nominated as Mayor of Chelmsford for the year 1972-73. Les has been a Councillor for eight years, and with Marconi for twelve years. He is co-ordinator of MRSL's Farnborough activities, is the liaison with Exhibition Unit, and has already started preparations for this year's show. With him is Jean Mackney of Exhibitions.





Queen Catherine works at New Parks

Isabel Blades, who recently played the lead in *The Rose Without a Thorn* for a local dramatic society, is here seen with Henry in the grounds of Kirby Muxloe Castle, a scheduled ancient monument close to the New Parks works.

Isabel, who comes from Carlisle, has worked at New Parks for six years and is Supervisor of the telephone exchange and telex centre. With a staff of eight she controls the New Parks communications links for Marconi Radar Systems Ltd., and GEC-Elliott Process Automation Ltd., on the New Parks site. The manual exchange handles well over 2,000 calls a day. Internal calls are handled by an automatic system. Two operators control the telex links, and together they handle an average of 150 messages a day to all parts of the world.

Isabel and her husband are both keen amateur actors. She is now brushing up her singing for her next part, *Josephine*, in *H.M.S. Pinafore*.

Successful fire-fighters

The Blackbird Road fire-fighting team has been building up its reputation, and has a number of successes to its credit. For the last three years in succession it has won the North East Aggregate Shield, and for the past eight consecutive years has won the Walter Dyson One Man Ambulance Cup. It has also won several trophies at national level.

The brigade is equipped and trained to local authority standards and practises two evenings a week. It runs courses for factory personnel on first aid and various aspects of fire-fighting, and in liaison with the Safety Officer and Works Engineer the brigade en-

Blackbird Rd. firemen. Back row, left to right: L. FM. D. Linett, DO D. Geary, DCO K. Powell, SO H. Whatmore. Front, FM. S. Banton, FM. S. Whitehead, FM. M. Peat.



sure that the factory fire prevention schemes are of a high standard.

Its Chief Officer is Dave Geary who has been with the Company for four years. He was previously a member of the Leicester City Fire Brigade and is a member of the Executive Council, North Eastern Section, of the British Fire Services Association. His deputy, Keith Powell, has been with the Brigade for 18 years, is captain of the competition team and the works' first aid team, as well as being Chief First Aid Instructor. Both Dave and Keith officiate regularly as judges at various competitions.

Monday football results

Every Monday morning Radio Leicester broadcasts reports and results of Sunday football matches. The broadcaster is none other than Bob Middleton who is Buyer at Blackbird Road. He is also a founder member and chairman of Leicestershire Sunday Junior League which caters for footballers under 18 years of age and is comprised of 51 teams made up of three divisions under 18 and two divisions under 16. The standard of football in this league is very high.

New Parks dance

The Sports and Social Club held their annual dance at the New Parks canteen on Friday, 4th February, 1972, when over 230 members and friends were present. The success of the evening was due, mostly, to the enthusiastic efforts of the Honorary Chairman, Bernard Meggs, Honorary Secretary, Dave Dryden, and the hard-working committee. Assistance from members of Management in the provision of raffle prizes and the help given by Reg Roberts was greatly appreciated. A substantial profit was made for club funds.

Prizegiving and open day

The annual prizegiving for first, second and final year apprentices will take place at Blackbird Road on 21st April. The Works will be open to parents, and 250 people are expected to attend. Chief guest will be Mr. Christopher Sykes, Training Advisor to the Industrial Society.

Long service awards

Long service awards have been made to three Blackbird Road people who have each served for thirty years. They are: Mrs. S. Sharpe of Stock Control; W. V. Butler, Section Leader, Test Dept.; and P. J. Cole, Assistant Works Engineer.

Norman Free retires

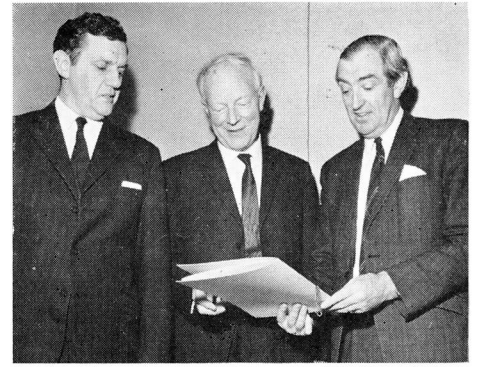
Norman Free is retiring after 32 years' service. He joined Works Order Department at BTH Rugby in 1940 and transferred to Blackbird Road, Leicester, in 1949 as Head of Buying, the appointment he retained until his retirement. He is an associate of the Institute of Purchasing and has contributed regularly to its magazine.

Husband and wife retire

Mrs. B. B. Davis, secretary to J. W. Sutherland, Managing Director, MRSL for 10 years, is retiring after 20 years' service with Marconi. Her husband, W. D. Davis, Engineering A. Baddow, is retiring after 17 years' service.

Disco dance

Systems Engineering people arranged a disco get-together and one Friday evening 108 of them went to the British Legion Hall at Broomfield. There they danced to the latest numbers and popular oldies, partook of the excellent refreshments supplied by organizers Heather Farrer, Georgina Fairweather, Avis Mapp and Barry Clements, and voted the



Dr. A. L. Whiteley, Head of Control Engineering, Leicester, centre, has retired. With him, to give him a send-off are: P. Way, General Manager, Leicester, and J. W. Sutherland, Managing Director.

evening a huge success. 'Ginger' Knight and the girls' husbands were barmen.

Another 'do' is planned, but what form should it take? Any ideas? Heather Farrer would be pleased to hear from you, on Cromptons int. or ext. 2520.



Message from Hermes

The Hermes Club team of four have been competing this year in Marconi Ten-Pin Bowling Section's Division I. Last year, in their first season, they became champions of Division II. Three of them are in Radar: Sally Holman and Ian Ross, seated, and Mike Brown, left. Martin Brown, Gt. Baddow Research, is on the right. With them is Jack Day, MCSL, the Section's Chairman and, for the present, its Secretary as well.

Gateshead

Apprentices

First event in the 1972 programme will be the dance at Hebburn on Wednesday, 29th March, with a group and a disco. Programme fixtures for the rest of the year will be published as arrangements are finalized.

E. J. Murdy has left Gateshead for Blackbird Road, Leicester, and becomes Works Accountant there. Before he did so, B. Kerr, Apprentice Association Chairman, presented a set of long-playing records in appreciation of his help and guidance as its treasurer. R. Sherwin, Works Manager, Gateshead, made the presentation, on behalf of his Company friends, of a black leather brief-case.

Bridge

If you play bridge or would like to learn, contact S. Kingston of Test Section, who is the Bridge Club Secretary. Marconi are in Division III of the Newcastle and District Bridge League and finished third last season. Matches are played on Tuesday or Wednesday evenings. There are six divisions, and plenty of scope.