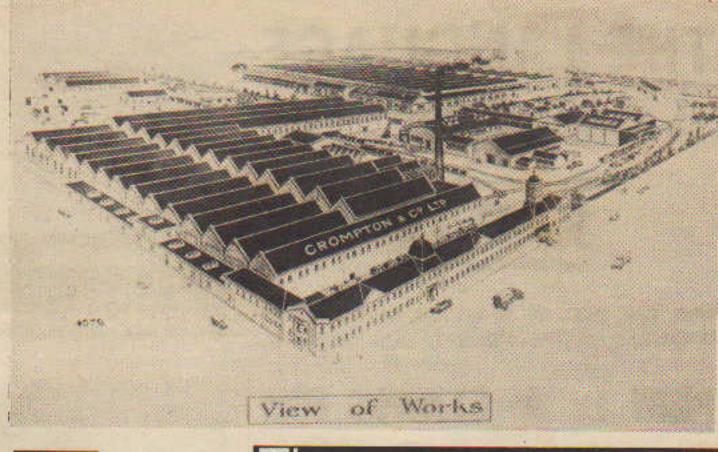


Marconi Radar Systems

Issue 1

July, 1982



WEWEGOT NEWS FOR YOU!

by the Editor

This is the first issue of a new news-sheet. produced by Marconi Radar for all employees at Writtle Road

We hope to print one issue per month, to coincide, if possible, with the four week pay period.

This first issue is not particularly representative, due to the fact that we eventually hope to include views and letters from everyone on the site - and, of course, there are none available for this, the very first issue.

We therefore invite you to contribute. Are you interested in writing about your hobbies? ... or perhaps you have had a particularly interesting holiday? Have you any views on ways of improving the site on improving Chelmsford even ... (there's an awful lot of scope Are you interested in writing about gardening? (If there is a new way with very little work, please let me know!).

We also intend to include an 'exchange and mart' section.
Other things that spring to mind are suggestions concerning entries in this news-sheet carloons, perhaps. Have you any interesting photographs that could be included? (Black and white only, I am afraid, although we may at some time be able to have a colour supplement, if for instance we decide to run a photographic competition.).

Are you interested in riding your 'hobby-horses' in print? A lot of people feel very strongly about current affairs ... why don't you drop us a line. We'll print all we possibly can.

Perhaps you believe that an employees marathon should be organised? or a pea-pushing contest up Danbury Hill? Any suggestions gratefully received. (Within reason).

Other features to be included are coming events at the Marconi Athletic and Social Club; special bargains at the site shop; features on various areas of the works; 'What's On In Chelmsford'; any special conganisation news that is of inter-

est, financial information on the company's performance; reasons for change in the company's organisation and such like news.

A feature I believe will be of considerable interest is a purely historical one. Are you an old Crompton's employee? How about writing us an article about what life was like in the old days? We have some old site photographs and will be publishing these. An article or two would provide additional interest.

Old pictures of Chelmsford would also be suitable, especially as so much of the town has been devastated by the planners. An awful lot of old Chelmsford exists only in the memories of the older inhabitants.

Tell us all about it before it is too

RECENT

Refurbished \$600 convoy.....£2m Naval surveillance systems..... Trolleys for torpedoes Spares for Abu Dhabi Defence Force £77k Royal Navy Post Design Services.....£875k Field services in Oman..... £870k Martello£10m+ TOR extension.....£2.5m

(k = £1,000)

way we were...

When Codric Dancer retired, after more than forty years service on the Writtle Road site, he passed over to us a rather interesting memento of the old days of Crompton works — a photo album containing an interesting collection of historic pictures.

Most of the photographs appear to have been taken in the 1920's, some, indeed, as early as 1919.

In the next few issues we hope to include pairs of 'then and now' photographs, indicating the changes the years have made to the works. Some of the pictures are of special interest, showing the wide difference between old

and new manfacturing methods. Others indicate that in parts of the works surprisingly few changes have been made.

To start the ball rolling, we reproduce what was the frontispiece of the album - an artist's impression of the works, drawn we believe, in the early 1920's.

Of interest is the imposing vehicle entrance, complete with a 'Big Ben' type clock tower. Was the entrance ever built in this impressive manner? Was it perhaps later demolished? If anyone knows, drop us a line, we'd very much like to know.



The great South Atlantic Fund march from Admiralty Arch to Tyn-dal Square by our patrolmen and friends turned out to be a resounding success.

Setting out from London on a dry but warm Sunday, the walking team of Ben Basham, Jim Blackshire, Paul Harden, Rod Jeffenes, John Robinson, Nick Stammers and Frank Wilson completed in style the entire 35.1 miles from Admirally Arch to Tyndal Square. Commencing, if anything, too en-thusiastically, the team were seen off at Admiralty Arch by Managing Director Keith Chittenden. The weather hold up very well, remembering what a wet day Saturday had been, and the team's time of 101/2 hours was exceptionally creditable, considering they'd had no training whatsoever.

The team of 5 Marconi security men, with Frank Wilson of Magnet Southerns and Nick Stammers of EIS (Cleaners) was escorted on its way by a van provided by FIS (Cleaners) and driven by Terry Candler Back-up and pace-making were provided by Bob Douglas, who travelled in the van. Bob also supplied encouragement when things got tough.

The walkers set off at 6.30am, on Sunday, June 20 at a good pace but the speed slowed after about 20 miles, where the pain barrier began to be felt.

At Widford and Mountnessing, support and encouragement was given by a group of Marconi people, including Eddle Edman and Bob Ditchfield. The footsore septet arrived at the British Legion in London Road, Chelmsford at about 4.30 on Sunday attempoon to be welcomed by Ronny Croft playing his bagpipes. Invigorated by the music, they all marched on to Tyndal Square where Sir Philip Watson and the Deputy Mayor. Mrs Angela Thackeray, together with Bob Scott, Brian Edwards and Gordon Mortiboy were waiting -Sir Philip with very welcome bottles of champagne!

Congratulations to the walkers. Together they have earned well over £2,000 for the South Atlantic Fund. With the company matching this, the fund will benefit by nearly



Engineer David on Task Force attack ship

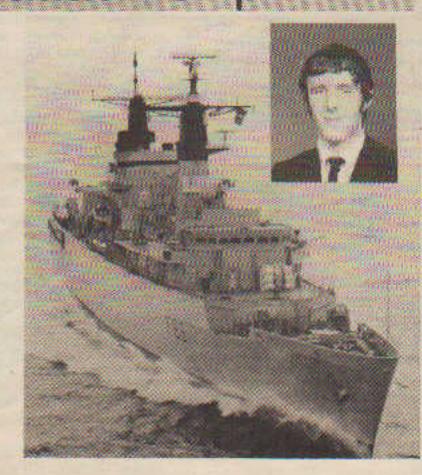
David Breen, one of the company's field support engineers, has had an experience that few Dritish civillans have suffered in recent years - he has been under fire in a fully

David, a 38-year-old electronic commissioning engineer, and an expert on the GWS25/ Saswoll missile control system, has worked for the company for 19 years. He was on board HMS Brittiant during a naval exercise in the Mediterranean when the ship was ordered to join the South Atlantic task force. After leaving the ship and returning to the United Kingdom. he volunteered to rejoin the vessel for its hezerdous mission to the Falkland Islands David (pictured) was then flown to Ascension Island where he rejoined HMS Brilliant.

He was on board when the ship was attacked by Argentinian cannontire but he fortunately escaped injury. He was also on board for the South Georgia invasion and for all subsequent actions around the West Falk-

HMS Brilliant, a Type 22 Frigate, and a sister ship to HMS Broadsword (pictured), was the first to use Seawolf in anger, shooting down two A4 Skyhawk aircraft and damaging a third so badly that it crashed into the sea.

Marconi Radar supplies the complete radar systems for the Seawolf missile systems on board HMS Brilliant and its sister ships and also provides other essential components. The company has also provided and fitted a wide range of other equipment for many of the other ships of the task force.



THE LANGUAGE

RADAR

The first part of a series defining the language of the modern radar system.

PART 1: 'A' STANDS FOR **AERIAL OR ANTENNA**

by Colin Latham

AERIAL OF ANTENNA are both words that mean the same thing, ANTENNA being the American version. 'A' also stands for Arguments - about whether more than one antenna should be antennas or antennae! In Marconi Radar, by the way, we use the word antennas antennae being reserved for insects.

Radar, like the parent science of radio, relies on aerials to receive and send signals. When Qugielmo Marconi made history by sending signals across the Atlantic, his receiving aerial in Newfoundland was a wire held aloft by a kite, while the transmitting aerial in Cornwall was strung from high towers.

Common examples of aerials in averyday use are the whip types used on care and some translator

These aerials are mainly used for receiving only, although the CB aerials are also used for transmit-

These 'whip' type serials give roughly an equal performance all round (omnidirectional) but the other very common serials, the 'fishbone' (or Yagi, from the name of the Japanese inventor) types used for TV favour a particular direction, giving improved recep-tion and also helping to ignore unwanted signals and interfer-

A radar uses a very high power transmitter and a very sensitive receiver.

The very early radars as used in Great Britain during the early years of the 1939-45 war, used separate transmitting and receiving aerials mounted on tall towers, similar to the one still existing on the Marconi Research site at Great Baddow. Most modern radars, however, use a common aerial which is switched between transmit and receive at rates of up to thousands of times a second.

For radar, accurately shaped beams of radiation are essential and these are often produced by using a specially shaped reflector, which acts as the radiation source when transmitting and the collector when receiving.

For some radar applications, such as the tracking radars which deal with only one target at a time, a 'pencil' type beam is required and this is produced by using a circular 'dish' reflector - somewhat similar to the reflectors used in car headlights.



Marconi Air Traffic Control antenna.

For survaillance or search type radars, a precisely shaped beam is required which is narrow in width to allow fine discrimination between close targets and broad in height to detect targets at widely different heights.

If this beam is swung in a circle by rotating the aerial, a full allround cover is produced, the angular position of the aerial. together with the indicated range. giving the position of the larget

If the vertical beam of a surveillance radar is divided into a num-ber of narrow, elightly overlapping beams, it is possible to obtain the height of each radar return, by using the known beam angle and the target distance.

This type of radar is known as 'three-dimensional'. The Marconi 'Martello' is a three-dimensional

Evan when extreme care is taken to produce a radar beam which has 'clean' or 'sharp' edges, inevitably radiation spills over in unwanted directions.

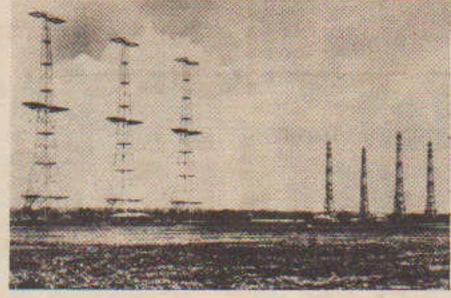
This unwanted radiation is called 'sidelobes' or 'backlobes' and can be of great disadvantage to military radars in jamming conditions.

Such side or backlobes can be minimised by using a 'planar' type aerial, as used on Martello.

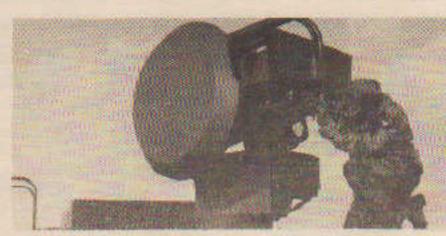
In this sort of aerial, a large number of small aerial elements are arranged over a flat surface. When care is taken to ensure that all the elements operate in the correct phase relationship, the resulted radiation from all the small elements combines to form a beam (or beams) of the required shape.

The techniques of radar aerial design have much in common with optics and similar principles are used in the design of, for example, astronomical telescopes, but using much shorter wavelengths.

Radar aerials require very sophisticated design, precision manufacture and very careful tes-ting, all of these skills very much the province of Marconi Radar.



Early radar CH (Chain Home) towers.



Marconi Tracker Antenna.

By Rod Challis, Chief Accountant

In 1982/83, the two main sites of Chelmsford and Leicester will be separately accounting, with Gateshead effectively a division of Chelmsford. Please note that certain statistics are not available for general publication as they are commercially sensi-

......

Sales (value of goods and services traded) in 1981/82 for the Chelmsford Divisions were £85M Orders (value of goods and services for which new orders or additions to existing orders were received, after deducting the major cancellations) in 1981/82 were £133M.

Our current order book is £209M.

The order book, whilst relatively high, contains orders which will not be traded for some time to come, and this figure does not reveal the fact that whilst in the short term we have temporary over capacity in some areas of production, there is shortage of resources in some engineering areas.

We are hopeful that our factory capacity problems can be solved by work for which we are now bidding, but competition is fierce and the need to be excellent, not only in technical performance but primarily in price and delivery, is only too obvious.

We currently employ, at Chelmsford and Norwich, 2832 people, which includes 231 student apprentices and trainees.

Our overheads, including research and development spend in 1982/83, are expected to be in excess of £26M (excluding Gateshead).

In future issues, we hope to run a series of articles on energy and utility costs, as they form a significant part of our overhead costs. Everyone can help to

This year at Chelmsford and Norwich we have budgetted for these costs as follows:

£18,000 Fuel oil £234,000 £253,000 Electricity Telephone & Telex £517,000

There is room for improvement and a number of measures will be taken to achieve these, including the following:

(1) Formation of an energy conservation group containing both management and employee representatives to regularly monitor costs and suggest means of achieving savings and maintaining these. Better utilisation of floor space occupation.

Installation of telephone recording equipment to isolate high usage areas.

We have to attack these costs and many others if we are to achieve competitive price levels and generate a secure work load.

The state of the s

OPINION

This is the column where I hope to induce all you folks into writing to us. The opinions included are mine alone and are all open to argument.

More than likely you will differ entirely - if so, please write! If I have stirred you enough to make you do so, then I have succeeded.

I have been around for a fair length of time now, and have developed quite a few fixed opinions — possibly biased! Among them is a subject that I have brooded upon for many years — the

continuing re-development of Chelmsford and its local area. Chelmsford has never been a particularly attractive town, but there were some areas that had a certain amount of charm. It is upon these areas that the planners have concentrated, and where

they have done the most harm. Do any of you remember Tyndal Street as it used to be before the shopping precinct was built? It was probably the oldest remaining piece of Chelmsford, with a lot of very old properties, some dating as far back as the 13th Century.

It was a pleasant street to shop in and included one extremely old

By the time the planners and developers had finished, what was left? A row of old properties (but not the older and more interesting - they're gone) faced by a vast brick wall, somewhat akin to Chelmsford Jail!

And how about the so-called 'Parkway'? It was again driven through a very old piece of town and succeeded in completely chopping Chelmsford in half.

Another feature of great discontent in the town is the shortage of parking spaces, exaggerated by the wide spaces for council use only and by the poor design of the shopping precinct, where vast areas of concrete sit empty, used only for access to the rear of the shops.

In Basildon, the shop access spaces are also car parks. Yet another point that irritates is the strange architecture which now appears to be the norm for Essex.

It has not only appeared in Chelmsford, but has also struck in Colchester. The style seems to be vaguely based upon a 19th Century fort, and everytime I pass one, I expect to see a row of cannon peeping over the battlements.

There also seems to have been a decision made to change the character of Chelmsford by turning the place into a sea of office

Vast numbers are being erected, all around the town increasing the aircady critical parking problems. But perhaps the council expects to expand into them eventually?

It is strange how, over the years. Essex has shrunk as sections have been incorporated into London — and jet, how the Essex County Council has increased in size! Perhaps some inverse law applica, as in all burenucracies.

The Editor

HEITHERS

Seawolf and the South Atlantic

During the Falkland Isles emergency, Television newsreels have shown some of the many successful Seawolf engagements, and the numerous additional references to the successes by the Media has already made Seawolf a household word.

Naval Division, the personnel of whom have been responsible for the design production and support of the GWS.25 Seawolf anti-missile system, has been involved 24 hours a day and seven days a week throughout the emergency; in addition many other areas within the Company have been called upon to provide support.

Charles Capon and his team have provided a rapid reaction to operational needs for hardware, frequently involving over night deliveries by car to airfields and dockyards.

Gateshead Works and Writtle Road Works have both worked wonders in delivering new items of hardware in a matter of weeks.

Our setting-to-work teams have worked long hours on board ships, to ensure that advanced operational dates could be met.

The scenario of the Falkland Islands has presented problems of deployment against new environment and threats which have been modelled on computer. As a result new software has been urgently written, proven at our test site and signalled to the fleet.

As an exceptional contribution, three members of Field Services volunteered and have served with the Task Force on H.M. Ships throughout the emergency. MOD (N) has acknowledged the very significant contribution which they have made to the operation of the Seawolf system.

I would like to express my appreciation to the many staff both within Naval Division and in other areas of the Company, who have worked with such enthusiasm to provide the support requested by MOD(N).
Roger P. Towell,
Project Group Manager GWS25,
Naval Division (Chelmsford).

Naval Division Organisation

WITH the award of the contract in March to develop, produce, set-towork and carry out trials on the new lightweight tracker, 805SW, for Seawolf, the future of Naval business at Chelmsford was stabilised.

The contract, after a year-long competition with the B.Ae/H.S.A. VM40 radar and as a result of a tremendous team effort by many people, enabled the Company to proceed with its plans to reorganise Naval Division. The position was further strengthened by the receipt of a new contract in April to continue development and to produce a new improved version of the Seawolf surveillance radar

Both the 805SW and the 967M contracts, which together form G.W.A. 25 MOD 3, are the re-sponsibility of a Project Group managed by Barry Pettican with Fred Gibney and Peter Marlow having been appointed as Project Managers for the 805SW and

967M projects respectively.

The new organisation includes development engineers, designers and draughtsmen welcomed into the Division in April on transfer from Development Division. Harry Fancy is the Development Engineering Manager to whom they report. At present, the majority of the Development Department in Naval Division is working on 805SW, but it is the intention to broaden the product base of the Division by investing in P.V. de-

velopment in order to expand the Naval business, with the assistance of the Naval Marketing organisation under Max Stothard.

The situation in the Systems Engineering Department which is managed by Alan Forwood, is similar. Again, the majority of staff are currently working on the 805SW and 967M projects, in-cluding a study for M.O.D. (N) to look into the fitting of 805SW to the proposed new A.S.W. frigate, the Type 23.

The Project Group responsible for G.W.S. 25 MOD O is managed by Roger Towell, with Ken Smith continuing as Production Operations Manager and Don Reed as Support Operations Manager. This group was recently awarded a P.D.S. contract for G.W.S. 25 MOD O and has been extremely busy in recent weeks supporting Seawolf ships which form part of the Falklands Task Force.

Terry Deane manages Project Group 3 and is responsible, not only for the remaining aspects of the Marcent and Mayfair projects, but also for a recently awarded contract to supply 800 Series radars to Brooke Marine at Lowestoff

The implementation of projects and the efforts to obtain further business would not be possible without the other senior members of Naval Division and their departments. Alan Johnston is Commercial Manager, concerned with a variety of aspects of the business, including contract conditions and pricing. Tony Glocombe is Manager of Divisional Services looking after computerised facilities for P.E.R.T. networks, project reporting systems, the Release Documentation office staff who have recently joined the Division and many administrative matters. Mike Debney has recently transferred from Accounts Department to take up the appointment of Divisional Accountant.

The total strength of Naval Divialon is currently in excess of 150 and the organisation chart is ehown alongside.

B. T. Loader

B. T. Loader Divisional Project Project Project Services Group 3 Group 2 Group 1 A. D. Slocombe B. J. Pettican T. H. Deane R. P. Towell D. Reed K. Smith P. Merlow F. Gibney Commercial Department Divisional Development Systems A. A. Johnston Engineering Engineering Accountant M. Debney A. V. Forwood H. Fancy

Smoke is a killer

protect the escape routes against the spread of fire and SMOKE.

Corridors, stairs and stair wells which form part of an escape route are particularly important and it is here will be found doors which are described as. SMOKE STOP DOORS.

The frequency that one finds these doors wedged or held back in the open position lends to the conclusion that it is not generally appreclated why they are provided.

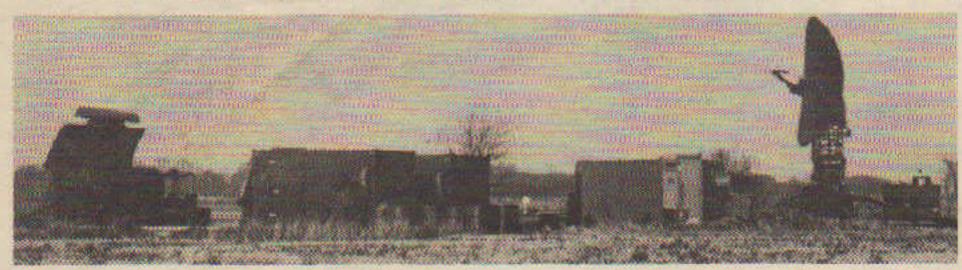
People who perish in fires usually die before they

The primary purpose of an 'Escape Route' is to provide occupants of a building, office or factory, with an un-obstructed way out to safety. A path which can be negotiated un-aided and un-hindered if the building or part of it is aftire.

Experience gained from some of the more disastrous fires has shown that it is necessary to protect the escape routes against the spread of fire. Smoke is made up of minute particles of burnt carbonaceous materials, tars and water vapour given off by burning timber, considerable quantities of carbon monoxide, and a host of other toxic gases and acids, all of which combine to produce irritation to the eyes and respiratory system. In addition, many of the toxic gases have disabling effects, for example small quantities of carbon monoxide will deprive the body of oxygen causing dizziness, impairment of vision and unconsciousness. It is to lessen the risk of smoke spreading through the building that self closing smoke stop doors are provided. Please make certain they will do their job if a fire does start.

KEEP SMOKE STOP DOORS CLOSED.
Issued by: K. N. W. GAMBLIN.

We beat the clock!



Marconi S600 Radars For The RAF!

IN recent weeks, Marconi employees have been working round the clock to fulfil urgent Ministry of Defence orders. These orders are for S600 series transportable convoys and required a six week turn round - a timescale only possible when allied to tremendous enthusiasm, hard work and organisation!

Each convoy comprises a search radar, a height finder and associated operations cabins, together with all necessary ancillary bits and pieces.

Although large numbers of \$600 convoys have been provided world-wide in recent years, these are the first to be supplied to the RAF. The very effective \$600 radars include many advanced techniques including digital signal processing and frequency diversity.

They are designed for easy and rapid movement by land, sea and air and are supplied in modular units to enable all types and sizes of radar systems to be readily provided.



What's the MASC

FRIDAY, JULY 2nd

8.15 p.m.

IN THE HALL

The popular sound of 'ENTERPRISE' Admission Free Late Bar Guests must be signed in

SATURDAY, JULY 3rd

CHELMSFORD LIONS

Charity Country & Western Dance Watch posters for details Tickets will be on sale from Reception when available

WEDNESDAY, JULY 7th

8 p.m.

8.00 p.m.

SUMMER BINGO EVENINGS In an air-conditioned environment every Wednesday during the Summer unless otherwise stated.

Accumulative Snowball— Plyer—Lines and Houses.

Kitchen and Bar Service available Guests must be signed in

Admission Free

Members Nip

FRIDAY, JULY 9th

CLUB DISCO

Members & Guest £2.00

Tickets from reception on the night

SATURDAY, JULY 10th

CLUB DANCE Dancing to The Big Band Sound on record with your lost 'EDDIE PORTER' Members 50p Late Bar Tickets from reception Guests 75p

FRIDAY, JULY 10th

8.15 p.m.

IN THE HALL

Country & Western Music and Dancing with

Admission Free - Late Bar - Guests must be signed in Late Bor

SATURDAY, JULY 17th

DAY OF SPORT & FUN AGAINST LOCAL FIRMS

Volunteers to form MASC teams Contact Tony Clifford

FRIDAY, JULY 23rd

CLUB DISCO

&p.m.

8.15 p.m.

Admission Free

FRIDAY, JULY 30th

Guests must be signed in One Guest per Member only

IN THE HALL

Admission Free

Listen or dance to the great sound of "WESTERN REVIVAL"

Guests must be signed in

SATURDAY, JULY 31st

CLUB DANCE

Members 50p

Dancing to the Big Band Sound on record with your host 'EDDIE PORTER' Guesta 75p Late Bar

COMMUNICATIONS/

'Chelmstord News' will not be the only new innovation to improve

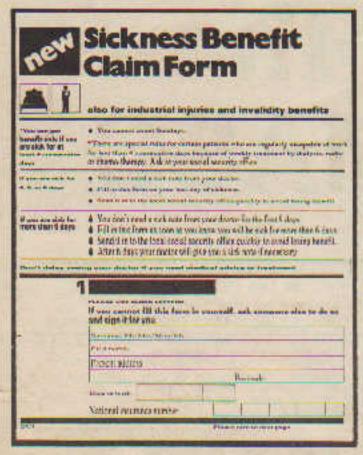
The Company intends to introduce small briefing groups in each Department with the aim of imparting relevant information two ways, namely from the Company to employees and vice versa. It seems clear that employees wish to be kept aware of the 'health' of the business and to have explained to them the reasons why certain decisions or policies are made. Equally employees will have much wisdom and experience that they can contribute.

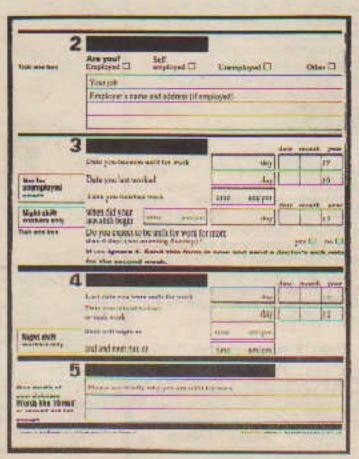
Such meetings will have to be kept short but regular. They will not, however, be successful unless all levels of staff make them succeed. There is no point in holding these meetings if they are not useful to the Company and employees.

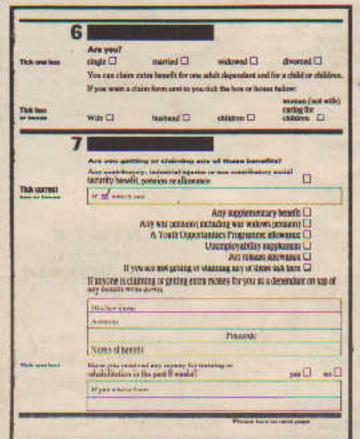
More details will be given shortly but: Do you agree with the idea? Will you participate? What topics should be covered? Please write to — Brian Edwards, Personnel Manager (Chelmsford), Room 5, 'B' Building with your views by 9th July, 1982.

Sick forms?

D WOU KNOW the form?







8	
FIX in early IF year bases bears a bought of separates at any those shows one becomes partly for eases.	Name and address of hydroid
9	Discur's same and abbreix
10	
to the period of	Write the most and address of pass resplayer when the address of agery forgotted. Department is much give denote of the amplifiest When the most give denote the amplifiest day
To great table	I declare that I have not excelled the interior the period of delegate which I have formed by present and some I claim benefit I agree to me do not given predicts from the example to me characters as a second to the present freelight delegate. Signs have **Continued on behalf of the present materials**
your doctor. If in	is are until for work for more than 0 days risk counting Sunday, so coursely the will give you a sick mire. Fill in the front and send it is security where to combine chambes.

DUE to changes in the sickness benefit rules, a doctor's certificate is not now required for illnesses of 4, 5 or 6 days. (Sunday does not count).

The new form, SCI, must, however, be completed to enable cickness handfit to be claimed. This bandfit, as before, is to be handed into the company. (It will be in the form of a Gyrocheque)

The company does not need to see the new form, so send it direct to

offices. Please note that the form is to be filled in on the last day of sickness and sent off to the DHSS as soon as possible.

If illness lasts for more than 6 days (7 days including Sunday), for the

first 6 days you fill in form \$C1 - afterwards, your doctor will give you a doctor's certificate. This you send in to the company who will forward it to the DHSS

Use of the new form not affect the so called 'linking' arrangements, Normally, you do not get paid for the first 3 days of sickness. If,

the appropriate Department of Health and Social Security Copies Soir as by you fall ill again within 8 weeks of returning to work, you form can be obtained from doctor's surgeries, hospitals and DHSS receive benefit for the whole of the second period of illness, including the first I days of it.

Compared to a lot of Government produced forms, SCI is comparatively simple to fill in. Section 5 may, however, produce some problems . . 'give details of your sickness - words like 'illness' or 'unwell' are not enough' could well lead to some very interesting answers. Perhaps they should issue a medical dictionary with every form?

If, by the way, you are still unsure on how to fill in the form, please concult your Personnel Officer, Manager, or Supervisor.

SPORT

GOLF

The annual fixture between the Marconi Radar Chelmsford, Leicester and Gateshead teams was played on Friday, 11th June. 1982.

Last year, the trophy was won by Gateshead, who fielded a very good team. This year, Leicester won it back again, but by the very narrow margin of only one point, after a very strong challenge by Chelmsford.

The results were Leicester 41 points, Chelmsford 40 points and a much weakened Gateshead team, 34 points.

The overall winners in this fourball, better-ball, Stapleford match were Cyril Smith and Ray Spillane for Leicester, while the Chelmsford pair of Max Stothard and Alan Shelley played extremely well to take the runners-up position.

The match, played on the excellent Lincolnshire Stoke Rochford course, was a resounding success. The guest of honour was Ken Merricks, Manager of Planning and Development, Blackbird Road, deputising for Dennis Lodge, who was unable to be present.

SOCCER

Marceni 6-a-side Competition CCC Edge Title

The first year of the Marconi floodlit competition came to an end with the CCC team just edging in front of the Marconi Athletic team to win the Mick Owen trophy.

Teams from MRSL had mixed fortunes, but Radar Test came a comfortable third place having played some very good football.

Next year's competition will start in the late Autumn, and we hope to have a few more teams entered. Further information can be obtained from Ray Gallantree (Baddow ext 39 int 349).

MARCONI 6-A-SIDE COMPETITION

FINAL POSITIONS		
Team	PWDLFAPE.	
CCC	24 19 4 1 39 3 61	
Marconi A	24 18 5 1 61 6 50 24 14 6 4 48 22 42	
Radartest	24 14 6 4 48 22 42	
Brondcast	24 10 5 9 22 23 35	
Redrovers	24 7 11 6 24 18 32	
Turilatry	24 7 11 6 24 18 32 24 8 7 9 16 13 31 34 8 7 9 10 25 31	
Veterans	24 R 7 Q 10 25 31	
Writtleng	24 5 12 7 10 16 27	
Marine II	24 6 5 13 18 28 23	
Baddowtad	24 5 8 11 13 32 23	
Brand X	24 6 5 13 18 38 23	
Foremans	24	
ACCCPEC:	24 4 4 16 0 70 16	

Inter-Departmental Football League

The annual general meeting of the league was held at the Marconi Athletic and Social Club on Thursday, 10th June, 1982. All the existing officials were re-elected with the exception of the secretary, Steve Aldred, who had to retire due to pressure of work. The new secretary is Trevor Hargrave, Room 560, 'E' Building, Telephone extension

Many thanks go to Steve for carrying out the onerous task

of secretary for the past three years.

The new football season will commence on Monday, August 9th, 1982, again with three competing divisions.

EXCHANGE AND MART

FURNITURE FOR CHILD'S

ROOM. Comprising: wardrobe

combination set (wardrobe, drop lest desk, pigeon holes,

etc.), 44" length 'dressing table', shelf and drawer along-side, white, £20. Boy's bike, suitable for about a 10-year-old,

£15. — Mrs S. Shakespeare, Rm. E524, Ext. 2159 or

Chelmsford 421135 (Writtle).

DINING ROOM TABLE and 4 chairs,

white, only 4 months' old, £40. 1 double bed, reasonable condition,

ELECTROLUX upright freezer Model TF60C, approx 6 cu.ft. Excellent condi-

tion. £40. - C. Shead, Chelmsford

£10. — Ext. 2303.

FOR SALE

CANNON GAS COOKER, V.g.c. £40 o.n.o. - Mrs. Gillam, ext. 2227. FRIDGE Electric, ice box, approx 3 cu.ft., working order, £15. Vacuum cleaner, hoses and brushes, ideal for the car, £12. Girl's bicycle, suit 8 year old, 'rough rider', £10. Black and Decker circular saw attachment, brand new, never been used. Will not fit H40 Drill, £8. Breaking for spares: Philips colour TV, 26" tube, 511 chasis, £10. ZX 81/80 Graphics Rom, complete set of space invaders plus others giving a total of 448 plus inverse. Also 4K Uar Defn avilable, fits inside case, £25. The 'Original Morphy Richards Flat Iron',

£1. - Tim Bell, Int 2632. MOBILE HOME 42ft long, site in pleasant surroundings between Galleywood and Stock. Lounge, 2 double bedrooms with fitted wardrobes, fully fitted kitchen, bath/shower, good size gerden including shed, £7,500 o.n.o. Quick sale required. — Tel. Stock 841009 (int. 2013).

CB ASTROPLANE HOMEBASE AE-RIAL, 5.8 Db gain. On a three piece interlocking mast with guide rope brackets. Plus 25ft of thick coax cable. Overall height 35ft. Price £30. — Contact Andy Cole, Tel. Southend 526017

353344 ext 2227. SOLID OAK dining table, four chairs, side board, four chairs, £45, Black and white TV, two years old, £20 ono. 3ft single bed oak, £20 one. Fridge, good order, £15 ono. — Contact Tony Camp, ext 2608 or 0245 66621 after 6pm.

FISHING TACKLE, cheap boat rod, reel, line, hooks, etc. Required for beginner. — G. F. Robinson, Room 22E. Tel. 2363.

All adverts accepted for this column are free, the service is available to Marconi employees only.

Retirements

MRS COLE retired 23rd April 1982 MRS A. TURNER retired 23rd April 1982 MR H. T. DAY retired 23rd April 1982 MR J. W. WHITE retired 29th April 1982 MR C. A. "Tubby" LAWRENCE MR. A. J. WRIGHT retired 12th May 1982 MR. E. W. WOOD retired 19th May 1982 MR. M. BURRAGE 21st May 1982 MR. S. CHURCH retired 21st May 1982 MRS. J. PETTY retired 25th June 1982

Employee discount scheme

Are you aware that Marconi employees can obtain significant discounts at local Chelmsford shops - and that all you have to show is your photographic security pass? This scheme covers a wide range of goods and includes such items as car batteries, double glazing, car hire, car radiators, and also jewellery. For your list of discounts, please contact Personnel Department, the Employee Shop, or look on your nearest notice board.