# Marconi 

## companies and their people



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## Astronautical link-up

Colonel Glenn's goodwill visit to this country was no mere sight-seeing tour. It was part of America's space programme. For to fulfil new projects wider co-operation is necessary in tracking her satellites. Hot on Glenn's heels comes news that The Marconi Company has won a contract from America through Cable and Wireless for the installation of communications equipment to assist the Apollo programme. (See page 2.) This is new work which smacks of the old tradition. On page 8 is a feature on an engineer who, over forty years ago, worked his way through Brazil to install wireless telegraph.
Pioneers we still have, and we also have the new Myriad computer. This computer can be applied to many problems and has lately been on show at the Business Efficiency Exhibition. Computer projects appear on page 14.

## The Marionette

A new image intensifier is announced by the M.I. X-ray Division. Named the 'Marionette', 'Mar' for Marconi, 'ion' for image orthicon, 'ette' for small, with the camera head suspended on wires, it is a ten-inch flat screen equipment for general hospital use.
This new diagnostic device is of entirely British manufacture and has unique advantages for the radiologist. It is fully automatic, transistorized, extremely compact and reliable.
The new equipment complements the outstandingly successful twelve inch image amplifier, now in use in over a hundred hospitals in the U.K. and overseas, but it is much cheaper and should therefore reach a wider market.

## Front Cover

Moored here in the Careenage, Bridgetown, Barbados, are vessels which still ply for trade among the islands of the West Indies. The first stage of the new radio telephone island link-up is now finished and remaining installations are nearing completion. See page 13. [J. Allan Cash]

## Left

To date a total of seventeen desk-size on-line Marconi Myriad computers have been ordered. Although primarily designed for air traffic control and defence applications, its high capacity and flexibility make it suitable for use in many other fields. One of the customers waiting for a model is the Royal Radar Establishment at Malvern, where it is to be used for advanced radar research projects [A Stanland Photo]

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Printed by Benham and Company Limited, Colchester
The Marionette, a new ten-inch flat screen diagnostic device for general hospital service, has been produced by M.I. X-ray Division. Demonstrating its use is Mrs. Sheila Jones of X-ray Division and Arthur Rixon


# MARCONT'S will be ussisting the FIRST MAN TO THE MOON 

Astronaut Glenn advising on the Apollo programme link-up



When the first American sets foot on the crater pitted lunar surface and goes off on his initial stroll through cosmic rain, Marconi's will be at the hub of the powerful communications network which will follow his every step.
This will be the British interest in the American Apollo man-on-the-moon programme which aims to make a manned soft-landing on one of the flat areas near the giant crater Copernicus before 1970. This interest has come to Britain via Cable and Wireless Limited, who have been awarded two contracts by the National Aeronautics and Space Administration for the provision of key communication systems on Ascension Island and in Bermuda.

On Ascension Island, Marconi's are to design, build and install a satellite communications earth terminal station which will communicate with the Goddard Space Flight Centre in Maryland via the Andover Earth Station, in Maine, through a synchronous satellite similar to Early Bird. A high frequency communications station at Bermuda will link the Apollo ship, normally located some 1,000 miles south east of the islands, and Goddard.

Marconi's vast background of knowledge and experience in communication systems of all types, and also in the design of satellite communication systems was an important factor in winning the contracts. Ultimate reliability is essential and as both stations have to be fully operational in less than a year, the team of men put to work on them

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top left: With his wife Annie, astronaut Glenn faced a barrage of questions from reporters on his recent London visit. above: Blast off from Cape Kennedy for Glenn on his triorbital flight. Marconi's will be involved in future rocket flight's. BELOW: 'I'll be helping with the programming of fiuture Apollo missions', Glenn tells Mrs. E. Ward, Assistant Editor of the Magazine


above: Of volcanic origin, Ascension Istand is situated in the Atlantic 780 miles N.W. of St. Helena. From here a Marconi designed and equipped satellite station will communicate with the Goddard Space Flight Centre in Maryland, below. This site, 15 miles north of Washington, has a $\$ 29$ million space lab

will be working concisely and with speed to meet the very tight Apollo schedule.

When he visited England last month on a goodwill tour on behalf of President Lyndon Johnson, America's first man to make an orbital space flight, Colonel John Glenn emphasized the need for Britain to take part in what he called 'not a space race, but a scientific exploration'.

He told a representative of Marconi Magazine: 'Britain could play a big part in the Apollo programme which is expanding to meet NASA requirements.'

Colonel Glenn, who piloted Friendship 7 round the earth three times in February 1962 is unlikely to go into space again, but is working with NASA as a consultant on the Apollo project and will be closely associated with the work done by the Marconi equipment once it goes into service. 'I work mainly on programming activities on the Apollo project', he said.

Speaking of the Apollo blast-off which will be aimed at landing a man on the moon's surface, Colonel Glenn said that a team of thirty young men were already in training and the man or men who

RIGHT: Marconi dishes will play a prominent part in the Apollo man-on-the-moon programme. On Ascension Island the system will include a 42-ft. steerable, parabolic aerial
would eventually manoeuvre a tiny space craft on to a crater-free area has already been chosen. 'I would have preferred to be the first man on the moon myself, rather than the old man of space', he commented.

Colonel Glenn predicted that future experiments would include the use of the longer lifeline for 'walking' in space, This was an essential part of the Apollo programme because if man was to become a regular orbital traveller he would have to be able to maintain the external parts of his space ship in case of trouble and he would only be able to do this with a 'space gun'.

On Ascension Island, in the earth terminal station, Marconi's will employ an advanced type of low noise receiver, cooled to more than $250^{\circ} \mathrm{C}$ below freezing point, by helium at near liquid temperatures. All main units of the receiver, and the high power transmitter will be duplicated, with a failure change-over time of as little as a fifth of a second.

When the time comes to shatter finally the myth and mystery that has perplexed mankind in spite of the manifestations of Galileo's telescope and subsequent astronomical discoveries, the Apollo spacecraft will be launched by a giant rocket and will re-enter the earth's atmosphere at a much

higher speed than its predecessors. Accurate knowledge of the flight path prior to re-entry will be essential as a small re-entry angle error could make the craft go into a permanent orbit of the earth, or re-enter too fast and burn out.

Reliable communications between the Goddard Space Flight Centre and the Ascension Island tracking stations are therefore vital.

Marconi's, in providing this link, will play a part consistent with tradition.
below: Sleepy Bermuda, noted for its tourist trade, will be the site of the Marconi equipped high power, high frequency communications system linking the Apollo ship with Bermuda and Goddard. below right: Marconi's Commercial Director D. G. Smee, left, and Sir John Macpherson, Chairman of Cable and Wireless, inspect a model of the type of dish to be used for the systems



An exhibition of the Marconi Company's products was held at the works of Eddystone Radio, Birmingham, for all to see. LEFT: D. G. Smee, Commercial Director of the Marconi Company, speaking to executives and guests. RIGHT: The exhibition also included an historical section, and Company Historian R. W. Bell, left, is showing how Marconi operated his first transmitter in 1895

## Attention to detail

Ever watched the M.I. Engraving Group at work, the operators concentrating on placing those little lines in exactly the right place?

While front panels, except for the serial numbers, are the same for each type of instrument and can be silk screened with special inks, the dials, because of slight mechanical and electrical differences in each instrument, must be individually engraved.

When an instrument is assembled and arrives at

[^1]
the calibrators the anodised aluminium dials are blank. The calibrator then connects up the instrument to his test gear, often specially designed for the purpose, and accurately marks each dial in pencil.

Here the engraver takes over and guides the cutter, revolving 250 times a second, exactly over the pencil marks. The figures are engraved with the aid of a strip of large type, which has been previously prepared, as a guide for the pantograph pointer. The engraving on the dial is then filled with paint in readiness for stoving. This is a simple, straight-forward operation, but one where attention to detail makes a Marconi instrument just that little bit better.

## Further education

After working hours a number of M.I. people met recently in the queues to enroll for evening classes at the St. Albans College of Further Education. The subjects range from cookery and carpentry to City and Guilds courses in engineering subjects.

Not only the students come from M.I. but also many of the lecturers, particularly in engineering subjects, including technical writing. The M.I. technical translator is instructing in Spanish. Even the chairman of the Governors, C. W. Lane, Personnel Officer, is from M.I., as are two other members of the Governing body and several members of advisory committees.

## Overseas with M.I.

## The mobile

With more than 50,000 miles already on the clock, the mobile demonstration unit is again on its travels. The current tour of Western Europe will cover some 6,000 miles and last until next July. Approximately 5,000 engineers will visit the unit during its tour and see the latest equipment from M.I.

## Technical articles

During the last two years, M.I. has had more than fifty acceptances of technical articles by journals outside the U.K. The articles deal with various aspects of electronic measurement and the journals range from Alta Frequenza to the Telecommunication Journal of Australia.

## Exhibitions

An extensive exhibition programme is being organized for 1966. New M.I. equipment will be setting the pace in New York, Paris, Copenhagen, Poznan, Peking, Stockholm, Brno, Plovdiv, Munich and Milan.
The Instruments, Electronics and Automation Exhibition in London next May will provide a major forum for presenting the latest in our instruments.

## Instrumentation

50,000 copies of each issue of this technical bulletin are now being distributed, a large proportion of these being sent overseas.

Visits from members of the staff's of M.I. overseas agents are frequent and on this occasion G. Moroni, of Marconi Italiana, is photographed with a special set-up consisting of the spectrum analyser OA 1094A, signal generator TF 2002 and the Marconi single side band transmitter/receiver



The M.I. showroom on wheels with its forty instruments worth about $£ 12,000$. V. Gregory, Exhibitions and Display Officer, and M. Walsh, Export Department, check that all is well before the mobile demonstration unit sets off on its ten months tour of Europe

## In the picture

Along with photographs by the well-known Walter Nürnberg and Cecil Beaton, two examples of work by John Harrison, M.I. Photographic, were shown at the recent International Exhibition of Photography held by the Royal Photographic Society of Great Britain in the Guildhall London. This exhibition of four hundred prints is now being shown in the provinces.

## Miss Marjorie Shipstone

Clerical staff officer for Marconi's from 1962, Miss Marjorie Shipstone died at her Chelmsford home after a short illness, She was 49 .

Miss Shipstone joined the Company in 1952 and was very well known and admired for activites in connection with M.A.S.C. She was chairman and secretary of the tennis section, and a member of the Club management committee of which she had been vice-president for seven years. An active sportswoman she won many local table-tennis titles and was women's singles champion in the Chelmsford and District League four times,

She will be greatly missed by her many friends and colleagues who wish to express their sincere sympathy to her family and friends.
H. M. Wickers of Technical Information Department tells us that forty-five years ago he undertook a tour of duty in central Brazil during which he carried out installations on the border of Peru...

## two thousand miles UP THE AMAZON



There is now only one engineer working in the Marconi Companies who can say that he joined as long ago as $1910-\mathrm{H}$. M. Wickers. He has served longer than anyone, for although he retired officially after fifty years' service, he has continued to work for Technical Information Department on the important job of writing handbooks, and he spends much of his time in Transmitter Development, where the heart of his interests lie.

Like so many of the Company's veteran engineers he started as a sea-going operator for the Marine Company in the White Star Line, and on one of his early transatlantic voyages in the Lanfranc sailed a thousand miles up the Amazon.
This voyage proved to be a taste of things to come. Wireless was almost unheard of in central Brazil at that time, and little did Mr. Wickers know then that the day would come when he would be very much concerned with taking it there. But for the immediate future he was looking for more exciting experiences at sea with the result that in 1911 he set out from Glasgow for Halifax, Novia Scotia, in the S.S. Seal, which in the winter sealing season explored the pack ice in the Gulf of St. Lawrence in a successful hunt for seals.
The wireless was of course his responsibility, but Mr. Wickers was able to take part in the work of the ship while sealing, and after the comparative soft seclusion of transatlantic luxury, he got down to living life the hard way in the wild waters of the north. This did not last long enough for him, for seconded to a Brazilian shipping company he found himself back in Brazil working from Pernambuco in the north to Rio Grande in the south.
Then came the Great War. In 1915 Mr. Wickers joined Naval Intelligence and was appointed by the Admiralty to Cape Verde Islands. He went there direct from Brazil to join the Consular staff and among other duties he assisted J. H. Welply, also a Marconi engineer, with the handling of a Marconi $1 \frac{1}{2} \mathrm{~kW}$ cart set used by the Admiralty. This had a rotary spark gap and, as an ultimate refinement in the receiver, a Fleming valve could be switched in circuit in place of the crystal detector.

He came home to Marconi's in 1919 to join the Field Station Division of the Wireless Company, then in the charge of R. D. Bangay. Among other

LEFT: Flooded river barges being rescued from the maw of the Amazon. All through central Brazil the river, in places miles wide, is flanked by dense jungle. top right : At a demonstration of the mobile telephone in 1920, President Epitacio Pessoa spoke from Petropolis to Rio. RIGHT: The $6 \mathrm{~kW}, \mathrm{CW}$ telegraph station installed at Para by H.M. Wickers. [All photos by H. M. Wickers]


members of the staff of this division at that time were Bertie Sadler, Anak Shore and Jimmy Welply.

The division was then marketing a very advanced portable wireless telephone developed during the war, and used in the field. It was also used at the Gallipoli landings. (See September issue.) A hard selling campaign was organized in which demonstrations were to take place overseas. Mr. Wickers was to take part in these and in December, 1919, he was posted. Where? Brazil!

Based on the Company's agents in Rio he became very busy with demonstrations of the portable


A wireless installation on the Oeste de Minas railway forty years ago. The towers are built of rails.
telephone, YC 2. He flew in seaplanes of the Brazilian Navy and in reconnaissance aircraft. It was the pilot of one of these who was reprimanded for landing in bushes; but closer inspection revealed that it was battery acid which had caused the fuselage fabric to rip leaving Mr. Wickers with a good bird's eye view of Brazil. He went to sea in destroyers with various officials using the equipment to determine its efficiency, and the climax came when the President himself requested a demonstration and spoke from Petropolis to Rio.

Brazil very quickly grasped the part that wireless communications would play in administrating her vast territory and it was not long before Marconi's was commissioned to install a series of telegraph stations so that the great River Amazon could be divided into telegraphic areas from Para at the mouth.
H. M. Wickers, who had gone out to give demonstrations of the mobile equipment, found himself mobile indeed, and instead of a short visit he spent altogether thirteen years in the country during which he penetrated the tributaries of the Amazon to the outskirts of civilization where, until radio came, it took a month to six weeks or more to communicate with the outside world. In those days the rivers were the only navigable routes and the only means of communication through the jungle swamps of central Brazil.

In Para on the river delta Mr. Wickers installed a 6 kW valve telegraph transmitter and for the State of Amazonas he installed three telegraph transmitters. Working from Manaos, itself a thousand miles up river, he travelled north over the equator line, up the Rio Branco to Boa Vista, not very far from British Guiana, about ten days voyage from Manaos. He travelled south-west through the vast jungle swamps, up the Medeira to Humaytá, and he travelled up the winding Amazon to Benjamin Constant on the Peruvian frontier.
'There was no difficulty in transporting material', he says. 'The cases were brought up by Booth Line steamers as far as Manaos and there transhipped to Brazilian river steamers.
'The Amazon has a vast network of channels and steamers would soon get lost without the help of pilots. The water is yellow and colours the sea for many miles off the mouth. The whole way from

[^2]

En route for Abadan. A bove: The Nairn transport bus about to set out from Damascus. RIGHT: A trackside stop in the burning Syrian desert two hundred miles out from Damascus on the five-hundred-mile trip to Bagdad. From there Mr . Wickers continued by train down the valley of the Euphrates to Basra, where it was $128^{\circ}$ in the shade, and by car across the border from Iraq into Persia. He erected a wireless link-up between oil towns Kermanshah, Naft-i-Shah and Abadan. below: This is the hotel in Kermanshah where he stayed. The label is still on his suitcase



Going home in the evening. This is the sort of country Mr. Wickers drove through in Persia

Para to Manaos the land is flat and one sees nothing but the dense jungle foliage draped with creepers to the water's edge.
'On my way up to Benjamin Constant I travelled in a river steamer which had a lower deck with hatches, and the passenger deck above it. I was shaving in my cabin one morning when I felt a bump, nothing very serious, and I soon forgot about it. However I noticed later that the lower deck was awash. A floating $\log$ had holed the vessel and a lower compartment was flooding. There was nowhere to beach in this vicinity, miles from land, and the captain was making at full speed for shallows further ahead. The crew started to lighten ship and among the first things to go was a deck cargo of water pipes. Then they opened hatches and started removing cargo from the holds, so I was careful to hang on to all my stuff and before it was in danger of going overboard the ship went aground. When fire broke out the Captain called the passengers together and told them that he was going to send them ashore in the life boats. In the circumstances, this was most inconvenient for me, so I asked permission to stay on board. The rest of the passengers departed and were disappearing from sight when a heavy downpour drenched them.
'After two days I got tired of waiting for a launch,
and when offered transport in a large local canoe I took the opportunity. Thus, sitting in the stern under a tarpaulin with all my belongings amidships, I set forth again up-stream paddled by ten Indians.
'However, a launch overtook us later and I transferred to it, eventually arriving at Benjamin Constant all intact except for my barrel of cement. This the Captain of the river steamer had commandeered to plug the hole.
'It was not long after the completion of the telegraph stations that 1 returned to Manaos to install a low-power broadcasting station. This had a wavelength of 100 metres, the shortest wave the Company was prepared to offer at that time.
'I came home in 1932 and the very next year went away again to Roumania with W. S. Fitch to hand over shipments of mobile military equipment. Then, in 1935, I went to Persia to erect a radio telephone link up of the oil areas Kermanshah and Naft-iShah with Abadan.'

That was Mr. Wicker's last assignment overseas. When he came home he was asked by Mr. Norman Lea, then Chief of Test, to join his department to write handbooks. This was the beginning of the technical service which over the years has developed into the organization now known as the Technical Information Department.

## Marconi Tropicana

With a hop, a skip and a jump, Marconi's are bringing up-to-date communications to the tropical crescent of Caribbean Islands with a tropospheric scatter system, the first link of which was put into use last month.
Barbados and Antigua were the first two islands to receive the new telephone service which will eventually put them and the rest of the archipelago in constant touch with the rest of the world. This was the first link in the 700 miles chain which the Company is contracted to complete on behalf of Cable and Wireless Limited. It will be extended to St. Lucia this month. Many Marconi engineers and fitters have been involved in the work which will join an underwater cable system to Bermuda, replacing an antiquated form of communication upon which islanders are at present dependent.

The Marconi contribution will involve more than a half-a-million pounds worth of equipment.


Below: Boggy Peak, Antigua-the highest point on the island and chosen for the tropospheric scatter link with St. Lucia, due to go into action this month. With one 30 ft. dish towering behind them, Ron Hudson and Bob Hughes, both of Felling M.P.D., work on the aluminium net surface of a second dish. On the roof of the building to the left of the picture can be seen the 4ft. dish for the $7,000 \mathrm{Mc} / \mathrm{s}$ link to the Cable and Wireless C.T.O. at Clare Hall, St. John's

ABOVE: Prior to lifting the dish on to its tower, the horn and supports are finally mounted to complete the assembly. All photographs were taken by $N$. K. Whitehead of Communications Division, while working on the system



## The Third Generation



With sales for their fast, desk-size on-line Myriad computer rising to the twenty mark, Computer Division has been helping to launch a new series of English Electric Leo Marconi computers-to be known as System 4.

Unlike Myriad, System 4 has not been designed to meet the demands of military and defence requirements, but is aimed primarily at the needs of the business and scientific worlds. It is in industry, and the smaller business concerns that it will come into its own.

Computer Division are responsible for the development of the two smaller computers in the series. The System 4-10 enables a user with a limited

Members of Techniques Section are, left to right, John Gibbs, seated, Chris Ogden, Andy King, Ian Harrison and John Scarlett
budget to have a processing power previously only within the range of larger concerns. Although it is the smallest in the group it is extremely powerful, and the combination of processing power and low cost makes it highly versatile.

The System 4-30 again gives high computing at moderate cost and can run sixteen peripheral devices concurrently to give a very high through-put. It can be working on different aspects of several jobs at the same time.
The two larger computers in the range, the 4-50 and the 4-70, are being developed and produced by E.E.L.M.

System 4 is the first computer family in the world in which all processors have been designed with micro-integrated circuitry. The fruits of meeting exacting space research and military electronics have been brought rapidly to the disposal of the commercial and scientific user.
Because of the use of micro-integration circuitry there are fewer separate components to be mounted -all logic functions are integrated on chips the size of pin-heads. In all four models single monolithic chips


Checking on some of the artwork for the two small computers in the System 4 series is Reg Paskell, Section Chief of Development Lab B. With him are Agnes McKenna, left, and Phyl Brown

OPPOSITE: The Myriad commissioning team having a final get-together before the computer was taken to the Business Efficiency Exhibition. Left to right: Brian Partridge, Ken Monger, Section Chief of Development A, Trevor Reeve, Bob Manning, Don Beckett, Roger Adams and Derek Jeffrey, seated. Below: The men of Systems Development, Group B. Front row, Frank Burroughs, Reg Paskell, Alan Ruffle, Brian Walker, and back row, Trevor Sawyer, Ron Williams and Colin Roberts


will be used for the integration of all logic functions.
The positive advantages of integrated circuits are reliability, cost, small size and speed.

Designed to meet the most sophisticated requirements of the next decade, System 4 was officially launched a few weeks ago and together with a working model of Myriad was the centre of considerable interest at the Business Efficiency Exhibition at Earl's Court last month.

Members of the division's drawing office who are working on the 4-10 and 4-30 are, left to right, Dave Mulberry, Julian Scott, Brian Crick, Senior Mechanical Designer, Peter Champ, Senior Section Chief, and Ronald Moore

## News from M.I.A.A.

The rafters of the canteen resounded when the start of another series of dances given by the M.I. Apprentice Association was heralded by the music of 'The Tudors' and their three girl vocalists, 'The. Carolines', with the 'Beaux Mavericks'.
To give the season a good start we were pleased to welcome R. E. Burnett, Managing Director, with Mrs. Burnett, Dr. H. S. Arms, Technical Director, with Mrs. Arms, and C. W. Lane, Personnel Manager. Although the attendance was not up to expectations (there were many other dances in the area, and the weather was downright atrocious) the dance was a social success. Financially the Association won through too, but only just.


Industrial visits are planned to Fords of Dagenham and to Rugby R.T.T. Station. The visit to Rugby is the fourth to be arranged so that everyone will have a chance to see the station.

A few hardy enthusiasts attended the 'Dragfest '65' (The Second International Drag Festival) and spent a thrilling day in the pouring rain at Blackbush. Rumour has it that there is more than one dragster on the drawing board or under construction by people at Longacres. It is possible that we may soon have our own dragster club? R.G.t.

## Any publicity

Readers may remember the photograph of the M.I. L-band aerials, looking like bird cages, which appeared in these pages last year. Prints of this photograph were circulated to newspapers and magazines throughout the world by the Central Office of Information. We have received more than fifty cuttings from these publications but sometimes the photograph appeared up-side-down and at least once it was printed on its side!

## Can you beat it?

Critic: A man who gives the best jeers of his life to television.

The Sunday Post

The M.I. apprentice store is well patronized on Monday and Friday lunchtimes when apprentices may draw components for their own use at no charge. Derek Taylor, left, is in charge and Nigel Eames is making enquiries about a chassis which is available


Ancient St. Albans. The Abbey and the Clock Tower are very old buildings, but older than all is the market. The Saturday market attracts numbers of people and here is a corner of the scene

## Each Wednesday and Saturday

Although St. Albans is only half an hour from London it is still the farming centre that it has been for hundreds of years, and people still come to the Wednesday cattle market and Saturday general market from miles around.
The market was laid out in St. Albans by the early Saxon abbots and in 948 the Church authorities enlarged it to occupy its more-or-less present site. The women's market around the clock tower, so called because items for household use, eggs and poultry were sold there, gradually became more permanent, the stalls being converted during the sixteenth and seventeenth centuries into the shops which are now between French Row and Chequer Street.

St. Albans, by virtue of ancient charters, was given in 1553 all the rights and privileges of holding a market on Wednesdays and Saturdays, while a new charter was granted in the reign of Charles II which has been uninterrupted to this day. The general market is still held on Saturdays in much the same position as it has been since pre-Norman days, but in 1926 the local farmers required more room than was available in front of the Town Hall and the cattle market was moved to its present covered site behind the shops in St. Peter's Street.

A visit to the cattle market is an interesting experience, if only to see a slice of ancient history in operation.
and the language-well, a jumble. Concentrate on getting to the German border as quickly as possible, but watch out for the motorcycle police. They have a habit of popping up in front after you have lost them in your driving mirror. And watch the speed restriction signs, they sometimes change from high to low in a few yards.

Over the border into Germany and the roads immediately improve. We usually make Köln (Cologne) the target for the first night and rest at one of the three camps on the Rhine. By autobahn the going is good, the main problem on these fast roads is dodging the huge transport lorries, often

# Have car, will trave/ 


#### Abstract

If you are already planning next year's holiday and thinking of taking your car abroad, here are some useful hints from someone who has been on the continent for the past two years, Tom Thompson of Inspection, Basildon


sign which says 'simmer frei'. The charge is usually a pound for two people in a room with double bed. If you are asked, include breakfast, otherwise it could be a few shillings dearer.
One thing, look for your accommodation before you arrive in a town-or after it-as you will sleep better in the country where there is less noise. Breakfast consists of coffee, rolls and jam: very pleasant if you are not an egg and bacon man. Other meals are marvellous, plenty of variety, superbly cooked and very cleanly served. The cakes are out of this world and the beer is cheap and strong. Tea is served in glasses but, unless exception-
the treacherous corkscrew bends which carry one down the other side we enjoyed, for round every corner there was some fresh delight. Fred didn't like the heights so we were forced to keep these journeys to a minimum.

Tour your 2,500 miles and enjoy yourself this way if you will. Do's and don'ts are largely a matter of experience but I will include a few here. Who knows, readers may get the bug for travelling abroad and, like us, the target will be Austria.

Banks close on Saturdays and Sundays and shops in many towns close on Saturday afternoons. Picture shows are either German or American made


Famous for its magnificent buildings and art treasures, Munich is also the home of this unusual fountain


Up goes the pole in Coblenz in thanksgiving for the harvest
top right: One of the many restaurant hotels at Garmisch in the Bavarian Alps not far from Oberammergau. right: The mountains sulrounding the Austrian town of Innsbruck, photographed from the town entrance [All photos by the author]

al , is not recommended either with cream or lemon.
Through Germany and Austria you have the choice of travelling hundreds of miles, either on the autobahn or off, through all the varied countryside and towns, with quaint houses, churches, unusual buses and trams together with all the different things which show how people in other countries live.

We loved the towns abounding in colourful markets, flower be-decked restaurants, shops crammed to capacity with every conceivable object. And the choice of scenery: wooded valleys, quiet rivers and old bridges, mountain slopes with tall pine forests and the turning twisting roads carrying one to the top and to breath-catching views. Even
with German dialogue. Cigarettes, many different kinds, and cigars are cheap; novelties are plentiful and of average price. Soup is popular, tasty, costly but well worth it; fruit is generally dear and iced coffee, though enjoyable, is also. Toilets are dear but all ice cream or coffee houses, or stores can oblige. Tipping is not required as $10 \%$ is added to all bills. Assistance, advice, route directions, board, lodging: everyone hurries to help when they see the G.B. on your car.
For the two of us, a fortnight cost $£ 100$ and that allows for petrol, food, smokes, drinks and souvenirs. And the pleasures we got from our holiday cannot be reckoned in pounds shillings and pence.


Break at Laleham for tea for the fourteen cars and their crews who took part in the second Hackbridge treasure humt. [T. Dagnall]

## HACKBRIDGE HAPPENINGS

## In Search of Treasure

The sun came out in all its glory and made the afternoon perfect for motoring when fourteen cars and crews took part in Terry Dagnall's second treasure hunt.

The first car was away from Hackbridge at 2.00 p.m. with a maximum allowance of 20 minutes in which to complete the first stage to Banstead Downs and the task of listing the locations of nine G.P.O. telephone kiosks. The second stage was rather more complex with a time limit of two hours and twenty questions to be answered on the journey from Epsom across country via Oxshott and Cobham to the Thames between Walton and Weybridge. The third stage took competitors via Walton-on-Thames and Shepperton to Laleham near Chertsey, a pleasant riverside district where long stretches of grassland line the river bank. Here the party took a well deserved pienic tea after completing the stage in one hour and puzzling over ten questions.

The final stage, with fifteen questions to be answered, numerous legs on public house signs to be counted, and a 'grand tour' of the Claygate area to be negotiated, was a tricky one indeed. The ingenious and tortuous route crossed and recrossed itself and then doubled back to the extent that competitors saw their enemies going the other way.

At 8.15 p.m. the last car arrived at the final checkpoint on Banstead Downs. Five of the starters had retired and of the nine finishers Mike Howarth of Filter Development Section was the winner by ten points over Derek Carpenter, while A. J. Rogers was third. Derek was unlucky not to have tied for first place but in the final reckoning it was found that he had exceeded the maximum mileage of fifty-five miles by one mile.

For the record Mike Howarth was driving a 1951 Hillman Minx which he uses for work everyday. When asked what he thought of the route he said, rather modestly, that he didn't think it was too difficult, but then again his navigator and fiancée, Ann Brett, is a very intelligent girl.

Everyone congratulates Terry Dagnall on the efficient organization of the event: he spent many evenings and weekends planning the course and covered 500 miles. He also helped Helen Rouse with the typing of the fantastic amount of paperwork required. Also lending a hand on the day were Ann Forsdick and Roy Allen.

## Colour Slide Evening

In place of the usual photographic competition this year the Photographic Section held a colour slide evening and members were asked to bring along three of their best slides for viewing. Judging was done by the audience who were asked to fill in a form marking up to five points for appeal and five
for technique. Twenty-five people enjoyed the evening, Gorden Bullen winning first prize by scoring 145 points for a picture of his very young daughter clad in half a bikini and mother's shoes. Michael Eddolls and Walter Cook tied for second prize with 142 points, and Cynthia Taylor took third prize with 138 points. The prizes, donated by the Social Club, were presented by the honorary treasurer R. C. Appleford.

Free refreshments, in the form of hot bangers, rolls and coffee and tea were prepared and served by Nancy Savell and Julie High. Secretary Walter Cook tells us he was well pleased with the event and hopes to run many more on the same lines. He is also hoping to arrange for a party of enthusiasts to go to the West End of London in December to take colour slides of the Christmas lights and decorations

## Instant masts

One of the most popular items on the calendar for M.P.D. Foremen's and Supervisors' Association was a film which dealt with the construction of radio masts and towers. The Felling men were particularly interested in a structure which was $1,000 \mathrm{ft}$. tall and erected in ten weeks.
It contained more than 27,000 nuts and bolts, and all the details had been constructed from wooden templates.
Although the film continued long after the usual time, interest was so keen that not one member left before the end or before a lively discussion had taken place.

## Obituaries

We are sorry to hear of the deaths of the following people and offer our sincere sympathy to relatives and friends.

Mrs. I. G. Wood, canteen assistant, who joined the Company in 1954.
Mr. Percy Drakeford, who retired from the Tool Room in 1958. He was 74 -years-old and joined the Company in 1913.

## Clock for the Director of Product Planning

At a gathering in the Beehive Lane Club, his friends in Communications Divisions gave A. W. H. Cole a clock when he became Director of Product Planning. Mr. Cole had been Manager, Communications, since 1948. From the left are W. J. Morcom, Mrs. Morcom, Mrs. M. Hemmings, E. H. Davis, Mrs. Davis, A. R. Laws, Mrs. Cole, Mr. Cole, Mrs. Laws, Mrs. Keller, B. T. Turner, Mrs. Turner and P. R. Keller


## Carnival Queen raises £200 for charity

Raising money for charity can be very tiring on the feet, as three young ladies from Corringham discovered when they took part in the 50 -mile walk from London to Brighton in the South East England Carnival Guild Charity Walk.

Corringham's Carnival Queen Gill Darnell, who works in Aeronautical Division Drawing Office, and her two attendants, between them covered ninety miles of the course and it was only because of blistered feet and tired muscles that they were forced to withdraw before the finish. For this very stout effort they collected over $£ 200$ - Gill was sponsored for a hundred pounds.



## M.I. in pictures

Nine photographs have been chosen for display out of the fifteen submitted by M.I. to the panel of the Fourth Industrial Photographic and Television Exhibition, Earls Court, this month. A large proportion of these pictures have appeared in Marconi Companies and Their People.

## The most beautiful toddler

A proud Dad at Basildon is Peter Cutler of Work Study: his little girl, Jane, recently won a cup for being chosen as the most beautiful toddler girl champion at Southend Carnival.

Chosen out of three hundred entrants whose ages ranged from two to seven years, blonde-haired, blue-eyed Jane passed all the tests, which included a health examination, deportment and personality, with flying colours. For winning her own class she was given a doll, while for being overall winner she has a large cup to hold for a year, and a small plaque to keep.


'Of course we are very proud of her, Peter said, 'though it wasn't our idea to enter her, it was her grandmother's.'

Let's hope Jane will be at the top of her class next year when she defends her title.

## No comment

Very proud of their garden-for a short while-were Louis Ypey, M.I. Prototype Wiring, and his wife. They were commended by the St. Albans R.D.C. for the appearance of their London Colney garden and then the council almost immediately dug it up to put in fresh drains. Made the roses look sick as well, but on the other hand the earth will certainly be deep dug for next year.

## Drawing office weddings

Congratulations to David Brewer of Transmitter Group D.O. who married Margaret Wright recently. His friends gave him a set of cutlery.

And to Ian Harvey of the same section who married Carol Ann Songer. Ian's friends gave him an electric mixer and set of scales.

Bz. . . .
A babies bath, pram eiderdown and sixpence change for Mrs. Barbara Whitlam of Beehive Lane from her friends when she left the Company. Barbara`s husband Roy is employed at Baddow.

Bz. . . . doing a stint of magazine selling at Beehive Lane while Hugh Cutmore was away, Mrs. Grace Stinchcombe and Basil Buller between them sold ninety magazines. Considering there are only about 150 people on the books at the Hive, we think that is pretty good going.

## A piece of cake

Although it was impossible for all her friends at Wembley to attend her wedding, Manager's secretary Janet Leaker was able to offer them all a piece of wedding cake. Trimmed and decorated in traditional style with church and luckyladen horseshoes, it was part of a surprise presentation together with a number of household gifts.

It was the work of Mrs. Pat Thomas (second left), for whom cake making is a hobby.

Janet's husband, who is with BAC at Weybridge, works on Marconi equipment in the VC 10. A Devonshire girl, she is now settling down in Woking.


## Hunt for striker

There is a big hunt on at Felling as keen ten-pin fans try to replace lucky striker Fred Blythe who has left Engineering Administration to join a local firm of metallurgists. And it is not only his skill with the wood they are trying to replace but also his ability to keep the

Engineering Ten-pin League spinning smoothly.
A Beatle fan, he was presented with another set of 1.p.'s for his collection by D. Sowerby, Office Supervisor.

## Lunch-time swim

Some M.I. people are so keen on swimming they spent their lunch times at the St. Albans open-air baths. Judy Avern, secretary to the Personnel Manager, was asked in the summer if Sports Club members could attend at the baths during the lunch time. She got in touch with the Council, who agreed that not only could they attend but at a very cheap rate. A number of hardy swimmers have, there-

## Christmas cheer

Why not order your Christmas drink through the M.A.S.C. this year? There's a $12 \frac{1}{2} \%$ discount on many brands of wines and spirits, if you haven't already got a list, give the Club a ring up Beehive Lane.

As usual the Club are asking for toys and money for the needy children of Essex. Any gifts are very welcome and will make many children happy this festive season.

In the Club office the smiling face of Mrs. Dot Stevens is a familar one. Give your drink orders to her, or take in some of those old toys your children have finished with.

fore, returned to work in the afternoon refreshed after their exercise. This scheme came to an end in September but it is hoped will start again next year.

## Night on the town

Pleasure seekers from Basildon, sixty-five of them, invaded London for an evening at the Fortune Theatre where they were treated to a riotous show, Wait a Minum. This was followed by an excellent dinner and entertainment at Nan's Pantry, Newbury Park, a favourite haunt of many Basildon theatre-goers.

Organized by John Bell and John Hayward, this outing was one of many enjoyed by people from the Development Workshop and Print Room. The next social occasion they can look forward to is a Christmas party and dance organized by the Development Workshop social committee, for over one hundred and seventy people, including their children.

## Under the gooseberry bush

Congratulations to Linda and Alisdair Macdonald on the arrival of a daughter Louise, who tipped the scales at 6 lb 14 oz . Alisdair is in Closed Circuit Television Labs at Waterhouse Lane.

## More girls for the drawing office

First to arrive at St. Peter's Hospital, Maldon, was Janice Yvette Coe, 7 lb 1 oz daughter of Dave and Myrtle. Janice's Dad now works at Witham but was until just recently a draughtsman at Baddow.

The second arrival, this time at St . John's Hospital, Chelmsford, was Julie Anne Garwood, 5 lb 6 oz daughter of Roy and Mary. Julie's Dad is a draughtsman too, stationed at Baddow, and a very popular member of the M.A.S.C.

## Can you beat it?

mandate: What girls are always trying to get.

The Sumday Post


## What about our photograph ?

Two motor-cycle enthusiasts at Basildon are Fred Talbot and Bert Saunders, both Leading hands in Assembly 15. Although Bert doesn't participate any more, he still goes along to scrambles, while Fred still rides. When George Hoare, who takes photographs for us at Basildon, was going by armed with his camera one day, they both said what about our picture. Well, here it is.

## The longest coolest smoke ever!

The day's supply in one cigarette. When Basildon's Chief Production Engineer, Derek Spurging, transferred to New Street, this monster cigarette, specially prepared by Carreras, was presented to him by his Methods and Tool Drawing Office staff. We don't know whether he got through it in one sitting.
Friends at Basildon also gave him an appropriately etched printed board, a Parker 51 pen and a transparency projector and screen.


## WETH

## HBET

## WHSHES...



Left: After twenty-eight years with the Company, J. W. Sanger-Stevens, latterly Engineering Administrator at M.P.D., Felling, left the Company to take up part-time teaching. His parting gift of an electric fire was presented to him by G. F. W. Alder, Works Manager, on behalf of all his friends. RIGHT: A rousing send-off for Basildon's Chief Production Engineer D. W. Spurging when he transferred to New Street. His friends gave him a transparency projector, Parker 51 and cigarettes, presented on their behalf by R. A. Coldwell, Works Manager. [G. Hoare]


Left: Rivenhall people wished John le Good every happiness when he married, and gave him an electric fire and tea pot. A. L. Webb, Stores Controller, made the presentation. Centre: Hackbridge celebration. When Ron Cullen, Filter Section Chargehand, married, his friends gave him a coffee percolator, bread board and knife and a butter dish. Works Manager, G. E. Lindsley, made the presentation [D. Dwyer]. RIGHT: A Machine Shop celebration when Vince Botham married recently. His friends gave him a stainless steel tray and baking tin, presented by Foreman A. P. Hazell


Left: Retiring after twenty-two years with the Company, Tom Adams of Maintenance, was given an engraved pocket watch, tobacco, and silver plated shovel and brush, presented on behalf of his friends by D. Hobart, Superintendent, Project Maintenance. centre: The wedding gift to Norman Walker, inspector, from his friends in Aeronautical Division at Basildon was an ottoman, presented by W. French, Inspection Section Leader [G. Hoare]. right: When Terry Collinson of Project Control, Basildon, married, his friends gave him kitchen utensils, presented by Project Controller M. James, left [G. Hoare]


Left: Mrs. Maria Haskins has reached the grand old age of twenty-one so E. Hands, Manager, Group 833, presented her with a dressing table set on behalf of her M.I. friends. Centre: When Education and Training Manager J. A. Fredericks left the Company, his friends gave him a silver cigarette box, pen and pencil set and a cheque, presented by J. F. H. Pease-Watkin, Manager, Central Staff Services, left. RIGHT: A shawl and a baby chair from her friends of M.I. Service Division for Mrs. Pauline Thompson and B. Mapley, Test 'A' Superintendent, made the presentation


Left: A double presentation at Rivenhall when Stan Slater married Mary Nickels. Their friends gave them a fire screen, companion set and pyrex cooking dish, presented by A. L. Webb, Stores Controller, right, and C. R. Cranfield, Cableform Foreman. CENTre: Wedding bells for Jean Turner, M.I. Group 822, and her friends gave her a rug and glassware which were presented by M. Fuller, Calibration Section Leader. RIGHT: A cheque for Derek Saffell of Inspection, Widford, right, when he married. The presentation was made by J. Missen, Supervisor of Inspection


LEFT: Malcolm Cowell of S Group, Widford, was given a cheque when he married recently. Production Controller W. Staines made the presentation. Centre: A canteen of cutlery for Terry Aves of Basildon Stores when he married. The presentation was made by B. King, Planning Controller [G. Hoare]. right: Wedding bells for Janet Patience and her friends in the canteen gave her an electric kettle, presented by Mrs. D. Warren, canteen Manageress. Janet's friends in Marconi House gave her a cheque, glasses and sheets

left: A host of gifts for Mrs. Audrey Cummings, Winding Shop, when she married. On behalf of her friends M. Carter, Section Leader, Group Control, presented her with a candlewick bedspread, glassware and stainless steel kitchenware. CENTRE: Friends in $R \& D$ Workshop gave Alan Jones money when he married. Foreman F. Watts made the presentation on their behalf. RIGHT: A coffee set and a bouquet of flowers were the wedding gifts to Ena Nicholson of Quality Control, M.P.D. The presentation was made by R. Cantwell, Chief of Quality Control, on behalf of her many well-wishers


LEFT: When he retired from M.P.D., Felling, Inspection Engineer Walter Heslop received a transistor radio from his friends and colleagues, which was handed over by R. Kennedy, Chief of Verification Group. Centre: After nine years with the Company, Dennis Stacey, Chargehand in the Winding Shop, has left the Company. His friends gave him an eight-day clock, door chimes and table lamp, presented by R. L. Price, Foreman. RIGHT: Cutlery was the gift to Johnny Porter of Section 15 from his friends when he married recently. V. J. Warner, Foreman, made the presentation


Left: After eleven years in Basildon Accounts, Mrs. Jean Evenden has left the Company. Before she went her friends gave her baby things, presented on their behalf by C. Ormerod, Costing Controller [G. Hoare]. CENTRE: A cheque from his friends in $R$ \& D Workshop for Donald King when he married. R. F. Bernhardt, Superintendent, made the presentation. Right: Mrs. Iris Riley of Valve Stock Control, Waterhouse Lane, was given a clock, cot blankets, pillow slips, two baby's petticoats and a bib when she left the Company. The presentation was made by N. W. Jenkins, Chief of Stock Control


Left: Leaving M.P.D., Felling, to train at college before taking up teaching, Trevor Owens, market research assistant in the Sales Office, was presented with a stainless steel teapot by Sales Manager C. W. Amos. Centre: His friends in Production Engineering gave John (Dai) Read a brief case, wallet and pen when he left the Company to take up teaching. L. L. French, Chief Production Engineer, made the presentation. RIGHT: Baby things, including a cot blanket, cot sheets, pram rug and nightlight, were the gifts to Mrs. Marion Adams of International Division when she left the Company. H. J. Baker, Manager, made the presentation


LEFT: Before he left for Canada, Geoff Leather’s friends in Estimating gave him a suitcase, presented on their behalf by D. Polley, Chief Estimator. CEntre: A double presentation at Microelectronics, Witham, when Mrs. Vivien Field celebrated her twenty-first birthday and Richard Mossip married. Vivien was given a bracelet, compact, perfume and chocolates, while Richard had a steam iron. Both presentations were made by R. M. Carroll, Sales Manager [M. Rignall]. RIGHT: There were wedding gifts galore for Manager's secretary Janet Leaker when she left Wembley. They were presented to her by R. Charlton, Works Manager, on behalf
of her many friends $[N$. Butterworth $]$ of her many friends [N. Butterworth]

## (in)

## ST. ALBANS

## Setting a new trend

The start of previous seasons has been good, so this year the Hockey Club is setting a new trend by starting perhaps not so well. The men's and mixed teams consist of practically all new players. We are, of course, lucky to have new players but rather unlucky to lose our old ones.

The men's first game against I.C.I.


Clearance by Harry Barrett, who usually plays in goal, supported by Johln Williams, now beardless, and Peter Burnett

A strong defence preparing to clear a short corner.


Carrying the ball forward are Dave Brown and Dave Lane, captain of the M.I. mixed team
(Welwyn) was lost 7-2. The second game was again lost, this time by $7-0$ but the match was much better than the score suggests. We turned out with only eight men, all of whom played very well indeed. The new captain of this team is James Hiscott.

For the mixed team, captain David Lane, the season has not started quite so badly. After losing the first game 7-2 to St. Andrews, the toughest team we play, the team battled well to beat Murex 3-2. The winning goal was scored by Mrs. I. Lane who equalled last year's record for ladies scoring goals.

We welcome Peter Burnett, the Managing Director's son, to the men's team. He has played in a practice match and shows great promise.
D.L.

## After 5.15 p.m.

The M.I. canteen is certainly in full use during the evenings. On a recent evening, at various times, the shift people were having a meal, the Theatrical Society were rehearsing, the Table Tennis Club were in full swing and the Horticultural Society were holding a committee meeting.

The canteen is in use for the following regular events:

Mondays: Theatrical Society, table tennis matches, last in each month, floral arrangement.

Tuesdays: Old Time dance practice, table tennis practice.

Wednesdays: Archery, golf, bridge,
Thursdays: Modern dance classes.

The M.I. hockey players. On a recent Sunday our opponents did not turn up so the sixteen M.I. players enjoyed a practice match


Fridays: Social events or table tennis practice,

Saturdays: First in each month, Old Time Dance.
Sunday mornings: Archery
Watch the notice boards for further details of the following major events:-

27 November, childrens` party (4-9 year-olds).
31 December, New Year’s Eve dance, run by the Football Club.

14 January, children's party (10-14 year-olds).
The notice boards also give details of the following sections of the Social and Sports Club: Football, hockey, ciné films, netball, mountaineering horticulture and angling.


Held-but only just. John Smith, the M.I. reserve goalkeeper in action

## Bring out the cards

The A.G.M. of the M.I. Bridge Section was held in September, the quorum being provided only by the more enthusiastic members. A drive for new recruits is being made, however, and it is intended to arrange practice matches and friendly tournaments on alternate Wednesday Club nights.

This season the section has a team in the second division of the Herts Social Clubs Bridge League, and hope to improve on last year's record when they were runners-up for the wooden spoon. Anyone keen to play contract bridge will be welcomed if they contact one of the following committee members: Jim Akers, chairman, Roy Truan, secretary, and Ken Woodall, treasurer.

## Football

After nearly six years of cup, league and shield glory, the M.I. Football Club is going through a change of fortune, when every game is a tough one.
Over twenty players have recently parted company with the club, either trying their ability with senior clubs, back to Mid-Herts or having retired. The committee have set themselves the task of rebuilding, a job made even harder because both teams are playing each week in Herts County senior leagues.
The return after a knee operation of Ron Henry, Spurs 1964-65 captain and left back in their cup and league winning team, to his fourth year as club coach will help to rebuild us into the most feared and talked about club in this area of Hertfordshire-as it has been in the past.

A number of young players have been welcomed to the reserves. Very promising among these is Raymond Burr and also 'Jock' Wilson, currently playing at outside left in the First XI. Jock has been short-listed for county selection.

The social side of the club is still very


- Your fall-out's pretty heavy"

'No admittance to the dressing rooms for non-players.' M.I. reserves prepare to do battle with Royston Town.
active and arrangements are going ahead for the Christmas dinner and dance on 18 December in the canteen. An extra feature on the club's agenda is a New Year's Eve dance, admission by ticket only, so get yours now.
G.w.


Fifty years of football between them. George Clabon, chairman of the M.I. Football Club, at work on Roy Turner before a match

## Like father like son

For the past fifteen years Old Time dancing at M.I. has proved a very popular pastime. All this time it was organized by Bert Mayger. Although he still has an interest in dancing, Bert has now retired from M.I. However, the Old Time dances will still go on as his son

Geoffrey is also an exponent of Old Time and has recently joined the Company from British Aircraft Corporation.

Geoffrey has been associated with dancing as a hobby from the age of eight, first in pantomime, then in musical revue and in ballroom dancing. In 1953 he became a qualified professional in Old Time.

Quite the wrong impression of O.T. is given by the uninitiated, who frequently express it as the Gay Gordons, St. Bernard's Waltz and all that sort of thing'. When asked what O.T. really is, he just said 'come along on Tuesday evening'.

It is his hope to increase the size of the Tuesday evening class and he extends an invitation to all to take up O.T. and join the other keen new members from the Company.

The monthly dance has again proved popular, attracting two hundred people from all over Hertfordshire and the adjoining counties. One couple even drove from Brighton and back so as not to miss the grand opening night. Part of the success of these dances is due to the splendid work of the Social and Sports Club committee.
G.M.

## (2) <br> CHELMSFORD

## Winter tennis

The hard courts are available for play throughout the winter months: anyone who wants to keep his eye in can contact Peter Ager, John Hills or Alan Thorogood for balls.

At the A.G.M. at Beehive Lane the following officers and committee were elected: chairman, Peter Ager, Waterhouse Lane; secretary, John Hills, Waterhouse Lane; match secretary, Alan Thorogood, Broomfield; treasurer, Dick Milner, Waterhouse Lane; men's captain, Brian Piercy, Baddow; ladies’ captain, Pauline Trathan, New Street; committee, John Mahoney, Waterhouse Lane; Roy Grigg, Baddow; Jenny Taverner, Photographic Section; Peggy Payne, Baddow; Reg Soden, New Street; Mike Adler, Baddow; Bill White, Baddow.

## Mixed hockey

With the season well under way, the mixed hockey team are putting on a good show, with several excellent wins against teams who normally walk away with the honours. Notable amongst


Matches in the interdepartmental billiards and snooker league are now being played off. Here are members of the Supplies and Production Engineering team playing Baddow D.O. Left to right, Bill Butler, Leo Cooper, Aled Owen, Dick Whittacker and Jack Bruce


Playing a friendly game are Harry Ritchell and Pete Taylor. Members are thoroughly enjoying the games in their new headquarters
these was the away game against Colchester Young Conservatives, when Marconi's sent three resounding goals into the net to their one.

During this game, Beryl Agar went into the goal and warded off several sharp attacks with great success. She replaced Doug Barden, who has not returned to the game since last year's illness, but has been invaluable as umpire.

## Jazz section to be re-formed

After a long period of inactivity, it is hoped to re-form the Jazz Section of the M.A.S.C. When running, the section will hold its own jazz evening every Wednesday in the Club. A committee has been formed and anyone interested in joining should contact the chairman, Mick Holvey, in R and D Workshop, Writtle, or the Club Secretary.

'I normally weigh myself after luncli

## Billiards and snooker

It's a long time since we have had a report from the Billiards and Snooker Section, welcome back to the magazine pages!

With the tables in tip-top condition, eighteen teams in the snooker league, twelve in the billiards league, not forgetting the individual championship games and the inter club Pretyman
competition, the players and all concerned are in for a busy time.

After the long period of inactivity players can still recognize the right end of the cue. Jamie Lay is chairman and Ernie Knight has taken over the tough job of honorary secretary. The official membership card with the fixture list is now out.

## High kicks

With the football season now well under way, the three teams are not exactly setting the pace in their respective leagues. The senior team in the Essex and Suffolk Border League has played 7 games, losing 4 , winning 2 , and drawing 1. The teams best performance to date was a convincing win over Lexden Wanderers at Beehive Lane where a good clean hard fought match gave our lads a 6 goals to 1 win. The Reserves in the Mid Essex Premier has played 6 games, winning 2 and losing 4 , and put up a good performance when defeating Fyfield 3-1. There is a similar record for the third team in Division II: they have lost 4 games but have had 2 good wins against Stock, 4-1, and Writtle, 2-1.

The training sessions at Beehive Lane on Wednesday evenings are still well attended, which proves that players are


Making a shot is Dick Joslin of Communications, playing in the Communications versus S. Group match. Left to right are, Gordon Daniels, Wally Cooper, Hubert Hawkes, Nobby Standard and Eric Gravatt
determined to get the best out of their games.

## Darts

Darts players are all very pleased with their new 'playing pen' in the Beehive

Club and are looking forward to the twenty-eighth season.

The rules for this new season have been slightly amended to five pairs per team, and with twelve sections competing the scores should be lively and

A go-kart session in Victoria Road market. George Brown is cornering in a ten-lap practice race. Each lap is approximately oneeighth of a mile and takes 30 seconds to complete



Meetings are held every fortnight when M.A.A. members race their two karts against Crompton apprentices. Here are R. Abbotts, R. Taylor and, seated, D. Owers
entertaining. Tony Evans of Maritime D.O. and Nobby Clark of G.R.P. section have accepted the job of honorary secretaries looking after the administration, records and finances, with Ernie Knight as chairman.

The section is also looking for friendly fixtures so if anyone knows of a sporting crowd ready for a game, contact either Ernie or Tony.

## Bowls

Under the captaincy of Les Gurney, the Bowls Section has enjoyed a very pleasant season. Details are not to hand but it is expected that games have worked out evens. Players would like to thank the ladies who have provided endless cups of welcome tea.

Club competitions results are as follows: Interdepartmental, League A,

Some M.A.A. go-karting enthusiasts. Standing, D. Owers, R. Taylor, D. Smith, M. Holvey, R. Akehurst, M. Cornish, J. Hollom. Seated, R. Abbotts, R. Johnson, C. Orlopp and G. Brown


Writtle A; League B, Development C; knock-out, Robjohns Road. The singles champion is J. Jewell, with R. Bruce runner-up; while the handicap singles was won by J. Bruce, P. Howlett runnerup. The pairs competition was won by W. Donald and H. Flint, runners-up I. Gill and W. Boreham.

The club dinner dance is being held in the canteen at Waterhouse Lane tonight, 12 November. The A.G.M. is next Saturday, 20 November, in the E.E.V. canteen. Please give your support.

## (a) reume

## Darts

Already there is the promise of better things for M.P.D.'s team, which in the first game of the season defeated the Red Lion of Ouston 2-1 and inflicted similar defeats on the Queen's Head and St. Joseph's.

However, nervousness and complete loss of concentration cost the team their first defeat at the hands of another works team, that of Henleys Cables. If chances had been taken, M.P.D. would have found themselves at the top of the Birtley League, but as it was Henleys were the steadier team and by being so took the points.

## On the hook

The fishing league run by Felling Angling Club is producing some interesting results. After five events, Ted Stevenson of the Sales Department and Les Gorbold of Progress Department are tying for first place at the top of the league with a total catch of 12 lb each.
On the last outing of the Club, they visited South Shields, but catches were extremely poor. Only one fish was caught-a 1 lb . coalfish hooked by Ted. This was just sufficient for him to tie with Les, and the long season ahead is expected to add some excitement to the competition as they fight it out.

## Outside back cover

This scene in Long Green Valley, Maryland, is typical of the farming state where new trackers will be built to record American space flights and assist in progress to the moon [Paul Popper]


Picture of the month. This fine study of a red underwing moth was taken by Bill White of Baddow. He caught the moth, placed it on a piece of bark and photographed it with a close-up lens

'I forgot to tell you, Dad is in the insurance business.

'May I ask, Sir, if you have found the combination of the company's safe?

'I know you wear stays, 'cos Dad said he wished you'd make 'em shorter'



[^0]:    Left: Astronaut John Glenn climbs into the Mercury capsule Friendship 7 before blasting off on the first American manned orbital space flight

[^1]:    How it should be done. Bill Walker, Manager, M.I. Engraving Group, illustrating the engraving of a TF 144 H signal generator dial. The pantograph pointer in his right hand is held in a groove so that the line engraved shall be precisely the correct length

[^2]:    H. M. Wickers, second from right, with a pack set selected for trials from a shipment to Roumania in 1933

