



### The frozen South

#### EMPLOYEE SPENT TWO YEARS WITH POLAR SURVEY

A SMALL STEEL INCUBATOR in an antiseptic world of ice, the survey ship John Biscoe rides silently at her moorings under the blinding dazzle of the polar sun. The three-month, storm-tossed voyage has ended and, for the men who sailed in her, an even greater adventure is about to begin. They have successfully voyaged to the foot of the world, and the threads which hold them to civilisation are snapping free in the frozen snows of the Antarctic continent.

A group of them stand now against the stern rail of their ship, shielding their eyes from the sun's harsh glare, and thinking of the tasks that lie ahead. Outwardly, they are all very much alike—bearded, bronzed and furred-for-protection, aged between twenty and forty, in the peak of physical condition, self-reliant and supremely confident. Inwardly, they are different, particularly when their thoughts turn to home and those they have agreed to leave for the next two years.

But memories of families and friends and sootsoiled towns, green fields, rain and the scents of English villages are becoming increasingly difficult to recapture against a backcloth of glaciers. Here, only the snow is real. Here, only the present matters when life and death can depend on a layer of brittle pack ice.

"Come on, then!" someone shouts and, whooping with delight, like children discovering their first snowman of the winter, the men scramble over the ship's rail and jump to the neighbouring ice-shelf. The expedition is under way.

Among that group of men who ran forward eagerly to embrace the rigours of an almost-unknown continent was Barry Lister Golborne, a young electronics engineer. Just one more specialist in a tightly-knit group of specialists, but a man who can honestly claim to have earned the title of explorer.

Working now with A.T.E. as a trainee installer, centred at Liverpool, Barry Golborne looks back upon his polar excursion as one of the greatest thrills of his life. And, coming from a man who has also been to the North Pole on the world's only floating fish factory, this rates it as quite an experience.

Like many other men, Barry has the globe trotter's itch, but, unlike the majority, he doesn't sit at home scratching. When the restlessness starts he packs a bag and explores yet another section of the globe.

How did he get to the South Pole? Though it may seem a strange means of transportation, he started via a technical magazine in which he read an advertisement asking for men to join a Falkland Islands Dependencies Survey. He applied for the job, but it wasn't until he had had several interviews that he discovered the survey was to be in Antarctica.

In the Falkland Islands, he and the other explorers received their final orders before setting out for the polar region. After their long voyage in the *John Biscoe*, the men landed at Stanley, where they were faced with the formidable task of loading

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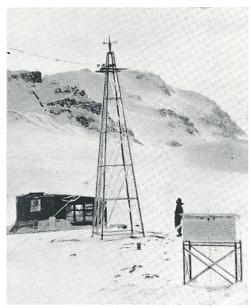
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Barry Golborne with a family of husky sledge dogs



Typical base set up by men on the expedition

the ship with sufficient supplies to keep them alive and happy for two years. They were then kitted out with eighty items of clothing apiece . . . string vests, anaraks and wind-proof garments. It was only later that they were to realise how important these clothes were.

On the way to their base at Admiralty Bay, where they spent the two years, the men visited a number of other Antarctic settlements to deliver supplies and mail. The bases vary greatly in size and importance and are manned by from five to ten men. They are anything from 25 to 200 miles apart and have no contact with each other.

Before he left England, Barry Golborne had done a lot of research into the territory which was to be his home. But how misleading even the most accurate of reports can be! He was only three days out from Stanley when the ship came across a tremendous iceberg, towering above the smooth sea and awe-inspiring in the mist. This was his first real contact with Antarctica. Barry began to realise how vast was the ice world. The continent consists of six million square miles of ice, with mountain peaks rising high above it. Most adults and children picture it as a flat saucer-like area

lying level with the sea. It actually rises 10,000 ft. above sea level, with glaciers and cliffs standing vertically from the water, making many parts of the coastline inaccessible. This is one reason why bases, in many cases, have to be so very far apart. Most of the peaks are unconquered. Barry found that only the polar plateau circling the actual pole, about a thousand miles in diameter, is reasonably flat.

Unloading the John Biscoe was a tricky job involving the stacking of supplies into boats in temperatures well below freezing and in 70-80 m.p.h. blizzards. The men had to cross rough seas to the shelf of hard ice surrounding the continent and then trek across land to their base site. The task was accomplished with the help of Falkland sailors. Stores averaged five tons of food per man, anthracite for cooking and heating, hydrogen cylinders and even a diesel engine. It was then essential that the base huts, to give the men protection against the elements, should be completed.

All the work on the base was shared among five men who found that they required an all-round knowledge. This was gleaned from a library of books, part of their equipment.

In fact, a book on dentistry was occasionally



Antarctica covers six million square miles—mostly ice and snow-capped peaks. The seas are always freezing

used for the extraction of unwanted molars. Day-to-day life was slow-moving when the base was finally established and the men set about their respective duties of studying meteorology, ionospheric propagation for the Department of Scientific and Industrial Research, topographical and geographical surveys and oceanography. They also studied wild life, including penguins, seals and birds.

Talking of penguins, it is interesting to learn that these "birds" lay eggs three times the size of hen eggs. The yoke of the egg is brilliant red and the outer is translucent blue. Newcomers to Antarctica are served with a couple of these for their breakfast and they usually leave the table very rapidly. Penguins themselves are sometimes killed for human consumption and the only way this can be done is with a heavy cosh. Large calibre rifle bullets will scarcely harm them. Some species of penguin are aggressive and their steel-hard flippers will break a man's arm.

Seals, many of which grow to ten feet in length and five tons in weight, provided excellent steaks for the survey teams. Other delicacies included iced-beer lollipops and giant polar birds. Strangely enough, fish are scarce. Fishing itself can be hazardous when it is realised that a man clad in the toughest of survival kit would live for only three minutes if he fell into the intensely cold waters. Even on land, wet clothing will freeze solid in ten seconds.

Amid the ice wastes, a human being's chances of survival depend to a large extent on husky dog teams. Barry trained many of these animals, which are killer and cannibal by instinct. They never fall ill and when they die, they drop, quite literally, in their tracks. "Life was never dull, but then we didn't expect it to be," says Barry.

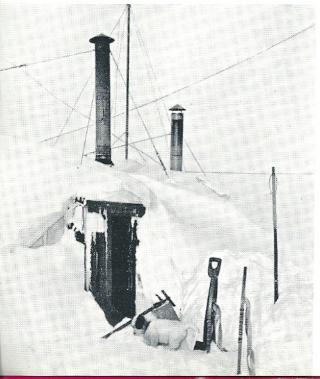
During the summer, Barry, who is a keen naturalist, found an abundance of wild life including seals, penguins, birds and such fish as there were to study. These creatures were often the patient models for many of the hundreds of photographs he took.

The base at which he stayed was one of many used by Dr. Vivian Fuchs on his 1957 trans-Antarctic expedition and the men, who knew the explorer well, felt that, in some small way, their work helped him on his way. This base, with its few huts huddled together on a vast expanse of ice,



Living accommodation—crowded and utilitarian

Winter snow can almost obliterate the huts



had little or no shelter from the elements. In summertime, the temperature has been known to rise as much as ten to twenty degrees above freezing, but this is of little consolation when, as frequently happens 62 degrees of frost are recorded.

During the windy season, Barry witnessed 450 lb. diesel drums floating about like leaves in a 100 m.p.h. gale, but, even in a region where almost anything can happen, this was registered as a freak. Temperatures in the summer can be very high in spite of the low air temperature. This meant that the men could often work stripped to the waist and they quickly became tanned. Goggles had to be worn all the time.

"During winter," says the now clean-shaven Barry, "in extreme conditions, it is completely impossible to keep warm. You just have to put up with it and try to prevent frostbite. One consolation is that if you go to the Antarctic fit and healthy you will remain like that during your stay, because of the absence of bacteria in the air. There is no such thing as the common cold, because cold germs can't live there."

During his first year in the polar region, Barry learnt the lessons vitally important to anyone who decides to explore. No risks are taken, no precautions are ignored. "One man at our base went out to a weather station about 25 yards away. A blizzard sprang up and, as a result, he was lost for some time—all because he had forgotten to attach a rope to his hut and to himself before leaving. We also took the precaution of carrying a compass around our necks."

Although he was not then associated with A.T.E., Barry remembers one or two items which will interest our employees. While on Falkland Island he saw the original telephone used by Shackleton in his headquarters en route for the pole and he was more than a little surprised to find that, on this island, nobody has to pay for telephone calls.

Back in England, and slowly adjusting himself to living a normal working life again, Barry still thinks he can hear the plaintive cries of the wild birds that circled his isolated base. He often studies the colour films he made of life so near the pole and he has hundreds of memories on which to dwell.

But he is not the sort of man who is content to dream for long. Some time in the future he means to go back again to Antarctica . . . but on a private expedition which will permit him to concentrate on photography and the study of wild life.

## Unique Exchange

SERVES A.T.E.'S

AN OUTSTANDING ACHIEVEMENT in the art of telecommunications engineering was marked on Wednesday, June 25th, when Sir Thomas Eades, Chairman of A.T.E. Group of companies, officially inaugurated a 1,000-line electronically-controlled private automatic exchange at the main manufacturing unit, Strowger Works, Liverpool.

The new electronically controlled exchange is believed to be unique in this country—and probably in the world—and will cater for all the internal telephone needs of our 23-acre factory and provide both-way junctions to the four branch factories. The exchange incorporates many new standards in production.

Sir Thomas told the engineers who were responsible for the new exchange: "We think there is a school of thought which believes in an intermediate step towards the ultimate all-electronic exchange; and equipment such as we see here may be a solution worthy of consideration."

Sir Thomas went on to say that there could be no doubt that the telecommunications art was experiencing great developments, equalled only by rapid progress in the field of nuclear physics. He affirmed his faith in, what he called, "the old brigade of engineers" and advised the "new brigade" how necessary it was for them to assimilate thoroughly the fundamental principles of electro-mechanical switching and system operation in all its phases on which they would build the application of electronics.

Mr. W. Saville, Chief Engineer (Production), and all who had been engaged on the task were complimented on the achievement, and Sir Thomas then made the inaugural call through the new equipment.



Sir Thomas Eades making the inaugural call through the new electronically controlled equipment



Some of the engineers who worked on the project and who attended the official cut-over



The Duke of Edinburgh inspects a guard of honour which includes Corporal Cheshire (wearing spectacles)

## Double citizens

FOREMEN are pretty good types. Not all foremen, of course, but foremen in general. Stan Jones, at present deputising for the foreman of Department 75, Strowger Works, strikes us as being a tolerant type. After all, how many men in his position—particularly if they are of Welsh extraction—would allow a man named Davies to disturb the lunch-hour quiet of a machine shop by practising the bagpipes? Well, not really bagpipes, a less octopus-like instrument called a chanter, but producing the same melancholy wail.

Ron Davies, disturber of the peace, is the kilted piper pictured on our front cover. He is seen with Platoon Sergeant L. Ralph—otherwise Len Ralph, of Department 472 Production—a comrade in the 1st Battalion Liverpool Scottish (T.A.) The Queen's Own Cameron Highlanders. They are but two of A.T.E.'s Liverpool employees who devote part of their spare time as Territorials in this proud regiment.

Other men from Strowger Works who serve alongside them include: Corporal Eddie Cheshire, Department 715 Carrier Records; Lance-Corporal Geoff Lawrence, Department 716; Frank Lee, Department 715; Dave Lupton, Plant Department; Peter Marr, Department 328; Dave Johnson, Department 06; and George Graham, Department 03. Their military occupations range from ordinary infantryman to trainee cook.

Some of these men were chosen to form a guard of honour on the occasion of the Duke of Edinburgh's visit to the regiment's headquarters in Fraser Street earlier this year. Scrgeant Ralph was presented personally and Prince Philip awarded him a silver medallion, one of only two given for the highest aggregate in an all-round shooting and physical endurance competition open to units of

which the Duke is Colonel-in-Chief, Colonel Commandant or Colonel. The sergeant is captain of the Liverpool Scottish small bore team and a member of the unit's crack rifle shooting team.

This is the jubilee year of the Territorial Army, and Sergeant Ralph and Corporal Cheshire were among those selected from the Liverpool Scottish to take part in the royal review in London last June. Together with other A.T.E. employees, they also took part in the big northern celebration parade held at Knowsley Hall, seat of Lord Derby. The sergeant was a member of the colour party on this occasion, hence the red sash he is wearing over his bottle green tunic on our cover.

Piper Davies, who has less than two years' training as an Army musician, was one of the men chosen to play at this year's installation of the governor of Edinburgh Castle. This was both an honour for the regiment and a personal commendation for the piper.

Len Ralph and Ron Davies both have previous Army service (the sergeant with the King's Own and the piper with the R.A.O.C.), as have most A.T.E. employees serving with the Liverpool Scottish. Their Territorial duties take up only one or two nights each week and occasional week-ends. Each man receives a minimum of about £10 every quarter and an annual bounty of up to £20. All kit and accessories, including Highland dress and equipment, are provided.

Members of the Liverpool Scottish wear the Forbes tartan of black, green and white in honour of their first commanding officer, Colonel C. Forbes Bell. The regiment was raised in 1900 as the 8th (Scottish) Volunteer Battalion The King's Liverpool Regiment and, eight years later, became the 10th Battalion King's on the formation of the Territorial Force.

During the 1914-18 war two battalions of the Liverpool Scottish served on the Western Front. The 1st Battalion served in the 55th Division and particularly distinguished itself at the Battle of Hooge on June 15th, 1916. The battalion sustained no fewer than four hundred casualties in the day. Hooge Day is one of the highlights of the regimental year.

In 1937, the regiment became a part of The Queen's Own Cameron Highlanders and was awarded its present colours at Goodison Park in 1938 by King George VI. In the second world war, the 1st Battalion again formed part of the 55th Division. Although the division did not go abroad,



The pipe band of the Liverpool Scottish on a parade

many members of the Liverpool Scottish served with distinction in other battalions of the Cameron Highlanders in all the major theatres of operations. The regiment now forms part of the 125 (West Lancashire) Infantry Brigade in 42 Infantry Division (T.A.).

A point of pride with the regiment is that one of their officers, the late Captain Noel Godfrey Chevasse, a doctor, is one of the few men ever to win a Victoria Cross and bar. The regimental museum in Fraser Street bristles with other awards, and stories of awards, and battle honours associated with this Merseyside unit. Territorial members are enthusiastically helping to maintain the high standards of service that have been established.

But the story of A.T.E. employees serving with the Territorial Army does not close with the Liverpool Scottish. We chose this regiment as one colourful example. Throughout the branches of our home organisation "double citizens" of many trades and professions are voluntarily giving up free time for service with dozens of different units. They are doing an important and worth-while job and the country is grateful to them.

# Night Patrol

**B**Y DAY, Strowger Works is a hustling centre of noisy activity, the banging and clanging of machinery and tools ringing out continuously from machine shops. It is a first-class example of twentieth-century industry with 10,000 workers plying their trade and skills and contributing to the production of vital telecommunication links.

By night, the factory changes. Machines lie idle, noise diminishes to an eerie silence, broken only by occasional sounds from departments where essential work continues non-stop. Beneath the dull glow of essential lighting, rows of equipment appear to take on new forms. In the shadows shapes change and temporarily lose their identities. Everything that is familiar in the daytime sunlight and even in the twilight of a winter afternoon becomes strange.

But this is the factory as it is known to the group of men who nightly act as its guardians. To them, the still and silent group of buildings, standing like a deserted 23-acre village, is familiar. They do not know it as a busy working community with as many comings and goings as a bechive in early summer.

These men form the well-trained band of night patrol security officers who check and re-check the factory for intruders, fire or any other suspicious and alarming incidents.

Obviously, for a job which has a twelve-hour shift and requires a man to be on his toes every minute, the standards demanded are high. The men chosen are more than normally observant, keen of hearing, healthy and energetic. There are normally fifteen of them and they work under the chief patrolman, Mr. J. Hurstfield. The organisation's four branch factories on Merseyside also have their own security men on duty at night. They report hourly by telephone to Strowger Works time office as an added safety measure.

At Strowger Works, there are always six men on duty at night-time to patrol the factory hourly from 8 p.m. until 8 a.m. During the short period after the thousands of employees leave the factory



A patrolman checks amid crated merchandise

a group of men from Plant Maintenance Department carry out the patrols until they are relieved by the regular security officers. This means that at no time after the factory closes is it left unwatched.

During the day-time, on Saturdays and Sundays, the men who form the evening patrols again go on duty, but they are relieved at 8 p.m. by the permanent night security officers.

To enable the night patrolmen to keep a close watch on every corner, corridor, office and workshop, the factory is divided into beats, similar to those of a policeman. Each beat is covered hourly by a man who has 24 checking points on each tour, which usually covers between one and two miles. This is one reason why, like the firm's team of postmen, the men have to be fit and pay particular attention to their pet corns.

At each of the checking points, the men collect a key from a strategic position. They use the key on a time-recording patrol clock which each man carries strapped over his shoulder. This registers the actual time the officer reaches his call point and is a foolproof method of checking up on events during the night... and of ensuring the man does not have forty winks on the way around the factory.

This, however, is not likely to occur at Strowger Works because each man is keen on his job and



Mr. J. Hurstfield, chief patrolman, triefs two of his officers before the start of an evening's duty

eager to do it well. After each beat the men are allowed a short break during which they may smoke—a luxury which is denied them while on the job because of the dangers of lighting a cigarette in a department where smoking is strictly forbidden for safety reasons.

During the night each patrol officer has a break for food . . . and what would *you* call a meal at two or three o'clock in the morning? Hardly supper, and hardly breakfast either!

What kind of men are the patrolmen who start working when most people are thinking of going to bed for the night? Do they have some objection to working when the sun is shining? Well, the men on patrol at Strowger Works during the small hours are not in any way unusual. In fact they are probably ranked among the most philosophical of men. They each have their own reason for working at night and each reason is sound and sensible.

One man likes to sleep during the morning and then have the rest of the day with his family as this gives him the opportunity of seeing more of his children than the average working man who arrives home at night just as his infants are going to bed. Some who "walk by night" find that they prefer to work in the darkness after being forced to do so during war-time emergencies. Others claim that night work has a peculiar attraction. Who are we to comment, we who only follow the ordinary routine of sitting at our desks from 8.30 until 5.30?

The patrolmen are often employees who have come from day jobs in factory departments and shops. On joining the night security team, they are trained by the factory's Fire Officer, Mr. Alfred Carpenter, and, after a short time, take their turn to act as firemen. Their training is not as intensive as that received by a member of the normal fire brigade, but it is sufficient to deal with any emergencies which may occur in the factory.

Mr. Carpenter is the man who interviews potential security patrolmen. What does he look for? "Well, they come in various types," he says, "but they must be observant, fit, intelligent and essentially keen." They are off duty two nights every week.

Part of the patrolmen's duty may be spent in the time-keeper's office where they receive hourly reports from the dispersal factories. These reports are logged for reference. If an hourly call becomes overdue, the patrolman reports to his chief, Mr. Hurstfield, who goes by car to the factory in question to check on the man on duty. The officer may have had an accident, he may have been taken ill, or he may have been attacked by intruders. Whatever the reason, patrolmen take no chances—that is the motto for all men on duty at nights.



A model made by a member of the A.T.M. Society

## THE 4-6-2

EVERYONE has heard of Stephenson's Rocket and the iron road that tore its way through the country-side bringing smoke and steam to the quiet cornfields and heralding locomotion. But many people look on locomotives only as a means of transport—a convenience or inconvenience, according to whether or not they run to time.

On the other hand, to a great number of men—and a few women—these engines have a fascination which, although vaguely connected with a child-hood dream to be an engine driver, is mature and completely serious. They are not cranks who have failed to grow up; they are keen amateurs making replicas of what they consider fine examples of engineering achievement. These are the model locomotive engineers.

There is no need to tell these men what an engrossing and creative hobby model engineering is, but those who look on it as an adult form of train spotting should be told more about it. This is a hobby that can bring to life, in miniature, a new world in which the twentieth century forces of jet propulsion, atomic and hydrogen power are

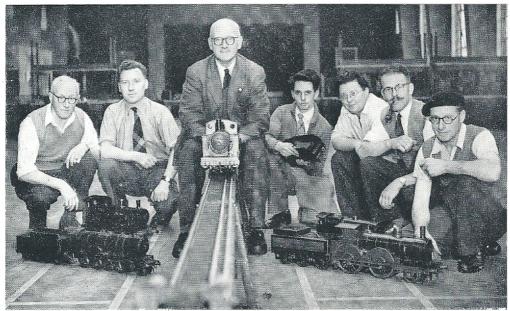
forgotten and steam again comes into its own.

Model engineers approach the construction of a scale model locomotive from different points of view. Some do not look ahead to the completion and the actual running of the engine on a track. Their pleasure is derived from the making and assembling of each minute part and the appearance of the finished model. Included in this group is A.T.E. estimating engineer Mr. William U. Dutch, of Department 205, Strowger Works, who is secretary of the Sports and Social Organisation's Model Engineering Society. He has been interested in model-making for many years, starting his hobby by tackling model aeroplanes. His interest finally centred on locomotives, which require a great deal of skill and patience to copy.

His hobby is done mainly in his workshop where he spends every possible hour of his spare time. At meetings of the Model Engineering Society, open to all employees of A.T.E., he enjoys discussing models with other members and the exchange of data, discoveries and general information, but his main interest is in actually working on a model.

A few years ago he decided to attempt something which to many experienced model engineers would be a most formidable task. His choice was a working scale model of a passenger engine at present operating on a British main line. His first step was to choose the engine and he did so by visiting a number of leading railway stations until he spotted one which he thought he was capable of tackling. The next step was to acquire the engineering plans from the railway authorities and to study photographs of the engine. This was the 4-6-2 wheel arrangement, four cylinder City of Nottingham, which is in the Duchess Class. The plans and drawings were the property of the old L.M.S., but were loaned to Mr. Dutch by British Railways who also arranged for a similar engine, centred at Camden, to work its way to Liverpool, so that he could spend a week-end inspecting and examining it before he started adapting the original plans. Needless to say, he was the envy of many friends and thousands of schoolboys.

These initial preparations were started two years ago and, since then, Mr. Dutch spent every moment he could on the model. But in spite of many hours groundwork he has done little of the actual construction and the model, at present, looks like a collection of odd pieces of steel. Still, they are slowly but surely taking on the shape of the official specifications. Mr. Dutch does not expect



Mr. William Dutch (second from right) with members of the society at a 'track-day' held in the works canteen

to complete the locomotive for several years. He has allowed ten for the complete job!

Mr. Dutch's workshop—the present one is the last of a long line which suffered during the war through bombing, evacuation and a trip to India—is small but the economy of space is often an asset.

As he is not particularly interested in the finished model but is gaining pleasure from the investigation and planning of the City of Nottingham, he is not worried by the delays which cannot be avoided when making even the smallest section by hand in his own workshop. At present he is building the chassis, which, besides other more important structural units, requires hundreds of rivets and bolts. He will be making many of these bolts and many of the parts for the four-cylinder engine which will drive the model. There are snags to be overcome when tackling such an immense job, but these can be overcome with patience, and the necessary skill and help can often be gained from members of the Engineering Society who have themselves been up against similar difficulties.

When it is complete, the model will probably go on show at an exhibition in London which is held to show the finer examples of model engineering. It will then be 4 ft. 6 ins. long (including the tender) and it will weigh about a hundredweight.

The history of the working model locomotive is difficult to trace, but model railways were being made shortly after the opening of the Stockton-Darlington railway in 1825. But even these early models, unsuccessful as the majority were, prove that the model engineering bug had bitten soon after the *Rocket* and early successors had launched steam-propelled travel. Today the model locomotive is the most popular of all working miniatures.

Mr. Dutch is able to drive an engine and he knows the vagaries which can beset them. He also knows the temperaments of boilers which can make the fireman's job an exasperating one and the fun of just running a few children around the Model Engineering Society's track at a sports day, but these are not the attractions which keep the hobby alive for him. He likes to build, to create, to mould with his hands and to overcome the many difficulties that try to prevent him doing this.

Bobbie Robinson, who drives one of A.T.E.'s cars at Strowger Works, spends her spare time writing. One of her plays, "And Pat Came Home", has been produced twice at a Liverpool theatre, and another, "Nipped in the Bud", is awaiting production. Bobbie has also recently completed a novel.

Sprinter Carole Carter, Department 676, Engineering, City Factory, already Northern Counties 100 yds. and 220 yds. record holder, has won Lancashire County titles over the same distances and has been chosen to take part in the Inter-Counties Championships at Barnsley.

Fred Streatly, Department 661, Strowger Works, finds his Friday lunch-hours fully occupied. After a quick snack, he makes his way to a small church near the factory where he usually conducts a service. The meeting, which is inter-denominational, is attended entirely by A.T.E. employees.

# We'd like you to meet . .

Winner of the newly-donated C. O. Boyse Trophy for the best male individual performance in all events at this year's sports day was trainee wireman Walter Crook, of Department 34, Strowger Works. He holds the managing director's cup for twelve months, and receives a replica.

Playing in the final of the Amsterdam Football Tournament, **Bob Wolstenholme**, a trainee in Department 66, City Factory, was one of a party of eighteen chosen from over a thousand boys in Liverpool to represent Liverpool Boys' Association. The team spent ten days in Holland, playing their way through five rounds of the competition before being beaten by a German team.

How many women are first-rate organists? Mary Davies, of Contract Typists Department, Strowger Works, has led the music at a church in Princes Road, Liverpool, for sixteen years.



Bobbie Robinson-playwright



Carole Carter—sprinter



Mary Davies-organist



Stuart and Doreen Gillespie



Ken Gregson—pigeon fancier



Dorothy Teire—amateur actress

Formerly a professional pianist, she studied under John Tobin and has accompanied many famous people including Roderick Jones, David Lloyd and Jean Cavall, the French cabaret singer.

Formerly a full-time professional entertainer, **Stuart Gillespie**, of Contracts Department, Strowger Works, has appeared on television several times with a miming act, which he shares with his wife. He entertains at variety theatres from Southport to Rhyl during the summer season in his spare time.

An A.T.E. employee with a book to treasure is **Eileen Hards**, now in Department 58, City Factory. During the war she was presented with it as a special award by Wilfred Pickles for never being late or absent from work and having the best production record in the factory. Eileen has suffered from paralysis since she was a child.

Ken Gregson, Department MOS 67, City Factory, races pigeons all over this country and the continent. Sometimes travelling 550 miles on a flight, his birds have several wins to their credit, including the Nantes and Rochefort classic races.

Dorothy Teire, of Publicity Department, gave up a week of her holidays this year to tour churches and hospitals in London with the Liverpool Theatre Club Players. She took part in seven performances of "How Now, Hecate" and is due to appear in the same play over forty times between now and next May.

Boxing has been the sport and hobby of **Stanley Yates**, C.S. Ltd., Scottish area manager, since he was a boy. In 1921 he held the schoolboys sevenstone senior championship for Great Britain and, in 1929, became the youngest B.B.B. of C. promoter in the country, staging shows in many parts of the North of England for several years.

In company with atomic explosions, *Tone* is making its presence felt on Christmas Island, in the South Pacific. **D. F. McDowell,** formerly of the Main Drawing Office, Strowger Works, now serving with the Royal Engineers, writes to tell us that he looks forward eagerly to each issue of the magazine which is sent to him by his father, **D. W. McDowell,** Relays Department 132.

## Portraits of an Industry

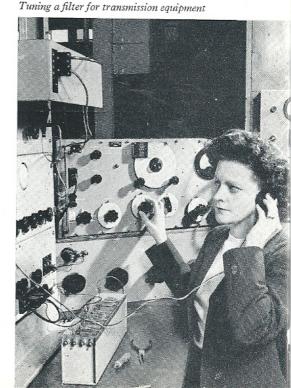
Speaking at the official opening of our unique private electronically-controlled exchange at Strowger Works recently, Sir Thomas Eades, Chairman of the Company, affirmed his faith in what he called the "old brigade" of engineers, and his confidence in the new. The veterans to whom he was referring are, of course, the men who have built up the Strowger principle of automatic telephony to the eminent position it holds throughout the world today. The new brigade includes the experts who, working upon foundations which others have laid, are exploring and developing the potentialities of new techniques within our industry. Advances already made in the art of

Advances already made in the art of telecommunications are equalled only by progress in the field of nuclear physics. That even greater success will crown the efforts of the specialists there is no doubt, for the boys of the new brigade are every bit as enterprising as their colleagues of the old.



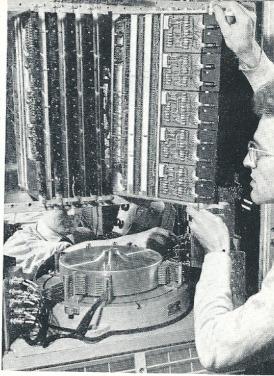
Tag block wiring on motor-driven uniselector rack

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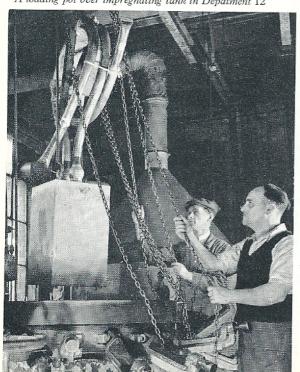


Precision evaporation of gold on quartz crystals



Checking operation of magnetic drum

#### A loading pot over impregnating tank in Depatment 12



Checking frequency of a crystal





Ingrid Bergman and Kurt Jurgens, stars of the film

## I stumbled into movies

Factory girl finds that filmmaking isn't always fun

ANKLE DEEP IN MUD, the young Chinese girl stopped work momentarily, straightened her back and glanced around the paddy field in which she was working. She looked across at her companions, clad—like her—in coolie clothes as they coaxed the rice crop into life. Sighing wearily, she bent down again and went on with her toil.

This young girl was Margaret Hoi, an A.T.E. employee. She was not engaged in any new company venture abroad, but taking part in the new Ingrid Bergman film *Inn of the Sixth Happiness* and the paddy field was part of a film set in the Welsh mountains.

Margaret's adventure began last April, when a photographer presented himself at the front door of her home in Selbourne Street, Liverpool, and said he was looking for Chinese children and young people to take part, as extras, in a new film production. After a moment of surprise, Margaret had her photograph taken, said goodbye to the cameraman, and wondered what she had let herself in for. When after a month, she had heard nothing further, she gave up the idea. But in mid-May she received a letter saying that she had been chosen to take part in the film and, if she could make the necessary arrangements, she would be required to leave for North Wales within a fortnight and be prepared to stay on location for about a month.

Margaret was granted leave of absence by A.T.E. and, on Friday evening, she waved goodbye to her colleagues in Department 16, City Factory.

Apart from the title and the stars, Margaret knew little about the film. It is the remarkable story of Gladys Aylward, a young servant girl who went to be a missionary. She saved for years until she had enough money to make the great overland journey, through Russia, to China. While there, she led an army of children from the advancing Japanese. Most of the film, which is in colour, was made in this country. When the company was on location in Wales there were more than five hundred extras from Liverpool alone. Margaret travelled from Liverpool by special bus to Beddgelert, where one of the film sets was located. Despite the beautiful scenery, Margaret's first impressions were not good. The prevailing memory of that first glimpse of the film world is of mud, and she recalls that she was thankful to settle down that evening in a comfortable hotel at Tremadoc.

Not many miles away from the hotel towered the ghost-like film sets. The great China wall and a village, with tall, stately pagodas and small, brightly-painted huts, incongruous in the quiet beauty of the Welsh countryside. The Eastern architecture looked real enough as long as one didn't peep behind to see the papier-mâché shells, with their frames and bolts.

Next morning, Margaret was whisked away for her first day's filming. At Beddgelert she was provided with a brightly-coloured Chinese costume and took up her position in a queue for make-up. There was great merriment as the new film actors and actresses looked at each other, dressed in the latest Beddgelert-a-la-Peking fashion. They were not so merry, however, when they found themselves being smeared with mud by enthusiastic make-up and wardrobe staff. Preparations complete, the young extras set about their day's work.

In film-making, a lot of time seems to be spent in waiting around for something to happen and, when a scene is eventually filmed, it is usually shot several times.

That first day of walking around in mud, resting on damp grass, with morning and afternoon coffeebreaks and a lunch provided by a mobile canteen, was not exactly what Margaret had imagined the life of a film-star would be. But there had been a great deal of fun and everyone had been eager to get a glimpse of the stars, Ingrid Bergman and Kurt Jurgens.

How did Margaret find life off the set, after getting over the novelty of the ever-watchful camera and rubbing shoulders with famous film stars? When work finished at 6.30 and the day's mud had been washed off, the girls at her hotel would settle down to a well-earned dinner (pork chop—not chow mein). There was no hurry, simply because there was nowhere to hurry to in the evenings. Dancing, cinemas, television and radio were not easily accessible and so the first few evenings were rather quiet. As more acquaintanceships were made, however, social life began to spark and Margaret and the other girls enjoyed a gay round of parties.

A young lady of many parts, Margaret, in the course of her month's new career, played a member of a band of Gladys Alyward's wards making the great trek across China to freedom, an angry villager, a worker in a paddy field and various other Chinese characters.

"Frankly," she says, "it was the first time most of us had worn Chinese clothes and, so far as language is concerned, apart from one or two members of the cast, there was nothing spoken but English.

"One incident which made us really glad we were Liverpool, 1958, and not China, 1930, was a scene we played as members of a party crossing a mountain range. Until comparatively recent years it was the custom in China to bind young girl's feet and squeeze them into ridiculously small wooden shoes. The story made it necessary for a lot of us to wear these shoes. Followed closely by the camera, we struggled on and on, our feet almost doubled to squeeze them into the toy-like shoes. There was no need to put on the required



Margaret Hoi of Department 16, City Factory

pained expression. We couldn't have avoided it if we had wanted to! After several re-takes the scene was finished and we were allowed to free ourselves from the torture. We all firmly decided that in future we were sticking to normal Western styles."

One of the first things her colleagues asked Margaret on her return was "Did you get any autographs?" "But," says Margaret, "meeting the stars every day, speaking to them and working with them, you just don't get around to asking for autographs."

Although Margaret spent a month in Wales on location, she has no idea how long she will appear on the screen. So many scenes are taken and re-taken that when shooting is finished there is usually enough material to make a film three times as long as the finished product is intended to be. Although Margaret will not be heard speaking, it is likely that she will be seen in close-up shots.

But seekers of glamour and the diamond-studded life of ease be warned. When asked if she would like to be a full-time film-actress, Margaret was most emphatic. "Definitely not. The work is nerve-racking. It was a relief to get back to my own job."



Training a deaf child with balloon vibrations

## Through the sound barrier

THE CROWDED HALL was tense and there was an air of watchfulness. The speaker was fluent, his subject completely capturing the interest of his audience, many of whom looked away from him and carefully studied two men who mouthed each word as he spoke.

This may sound like a new form of play-acting, but for thousands of people all over England it is reality. These are the people who have mastered the art of understanding and communicating without sound hearing, the people who have to see the spoken word or become cut off from everyday life.

What is it like to be deaf, to live in a world where not only the unpleasant sounds are unknown, but where voices of friends are never heard, music is non-existent and familiar noises have never been heard or are only faint memories? Deafness can be one of the world's greatest disabilities or it can be another nuisance which can be overcome with determination and a great sense of humour. It all depends on the temperament of the person involved.

Among the many "disabled" men and women employed by A.T.E. are a number who are hard of hearing, their disability ranging from a slight effect upon the hearing, which is greatly overcome by the use of a hearing aid, to total deafness. One of the partially deaf is Mr. Ronald Coppin, who is a diecasting machine operator in Department 96 at Strowger Works, Liverpool.

Ron will tell anyone who happens to be interested that he is lucky. He didn't become hard of hearing until after a childhood accident. Unlike the many people who are born totally deaf, he has memories and knows what people mean when they describe a sound or mention one in the course of conversation.

He is a determined man with a sense of humour, and these two qualities have stood him in good stead since his hearing faded. Although, at times, he misinterprets conversation . . . often by missing the point of a joke told by a workmate . . . he laughs at his mistakes.

A few years ago, Ron discovered the Federation of Hard of Hearing Clubs and although he had never allowed his deafness to make him a stay-athome, he decided that, through the clubs, he would be able to lead a fuller and more useful life. He already went to dances and cinemas, but found that there was a drawback to the latter because noises made by the audience drowned the sound-track reception on his hearing aid. This, he felt, would not occur at a club composed of people with the same disability. He would also be able to widen his interests through common restrictions.

He was right. He joined the North Western Federation of Hard of Hearing Clubs' branch which meets at the Liverpool Welfare Centre for Disabled Persons at 100, Walton Village, Walton, and soon found that a number of activities which he had never considered because of his disability were open to him. With other members of the club he joined in lively debates, went to specially organised talks and discussions and became an interested listener at many meetings.

The club's activities were comprehensive. There were social meetings where he was able to help others to master the art of dancing. Ron had attended many dances at Liverpool's well-known ballrooms because he found that he was able to

hear the particularly loud music of modern bands and his natural sense of rhythm had soon helped him to become a competent dancer.

At the club's first dance he was surprised to find that one pretty partner was totally deaf. For several dances her expert lip-reading had kept him in complete ignorance of this, and he was amazed by her knowledge of the dance routines. She told him the secret . . . many totally deaf people have become expert dancers by picking up the rhythm of the music from the vibrations made by bands through the floors of halls. The dancers often get their first cues to the tune by watching the steps of other dancers and following suit.

At other club meetings he attended, Ron met speakers who addressed audiences of deaf people by mouthing the words of their talks and never allowing a sound to be heard. At meetings where the main speaker talks in the normal way, assistants often stand on the platform beside him repeating the talk for the benefit of the totally deaf by mouthing. The lip-readers in the audience are able to follow the speaker in this way while the partially-deaf listen to the actual talk with hearing aids. At some meetings, blackboards are used to ensure that those who cannot lip-read or hear with the use of aids can gather the gist of the talk.

The parent body of the clubs, the British Association of Hard of Hearing Clubs, aims to encourage the wider use of lip-reading in the hopes of discouraging sign language. It is thought that in this way the hard of hearing will be able to mix more freely and with fewer restrictions.

Today, everything possible is being done to prevent deaf people becoming recluses. Older folk whose education was neglected during childhood because of lack of facilities are given the opportunity to go to school again. For those belonging to the North Western Federation of Hard of Hearing Clubs, courses are held at Burton Manor College for Adult Education.

At the clubroom in Walton Village members join in play-reading classes to help them clarify their speech, and courses in lip-reading. And as the members range from teenagers to old age pensioners there is always plenty of variety. Activities include whist drives, quizzes, games, film shows, mime, handicrafts, theatre parties, rambles, expeditions . . . the list is almost endless. Members will tackle anything that may widen their interests. Recently they formed a square-dancing



Ron Coppin, a diecasting machine operator

team which gave a number of demonstrations—and half the members were totally deaf! Ron Coppin was one of the keenest members of this team.

It is not all that long since Ron Coppin had to sit on the very front bench in his schoolrooms because he could not hear what his teacher was saying. But even since Ron's schooldays, the attitude towards the deaf has changed. Children now have hearing aids to help them to keep up with their studies if they are partially deaf.

Today, the word dumb is not recognised in its true sense by the medical profession. Children born totally deaf, who only a decade ago would have gone through life without uttering a word, are now taught to speak as fluently as their normal friends. Treatment methods are still improving and the "handicap" is being rapidly overcome.

Ron Coppin, who is a past chairman of the Young People's Section of the North Western Federation, is only one of thousands of people who have benefited through the clubs. He says: "They are a wonderful means of helping to overcome the shyness which seems a natural part of the make-up of deaf people. They are performing an excellent social service."



Bird-watching is a hobby with a difference and appeals to several of our employees at Strowger Works

## AWAY FROM IT ALL

WAITING FOR THE DAWN CHORUS IN THE WIRRAL

HEHAS A HOBBY that leads him over mountains, tramping through fields and woods, climbing trees, squelching through marshes and wading through streams and rivers. And he doesn't give a hoot for all those cracks he receives from his colleagues in Department 412 at Strowger Works.

Bob Crabtree is assistant secretary of the Merseyside Naturalists' Association. For as long as he can remember, he has been interested in birds and wild life generally, and, over a number of years, he has collected a library of more than a hundred books on the subject. But it was not until

1950, when he heard Peter Scott lecturing in Liverpool, that he became aware of the Merseyside Naturalists' Association. He joined, took an active part in its activities and, two years ago, was appointed to his present post.

The association, which has about 160 members, organises weekly excursions to spots of interest, from Snowdon to Silverdale, in the quest for knowledge. Bob takes part in most of these trips. He might find himself one week in the Welsh mountains, searching for alpine flowers, spending a week-end in a lighthouse watching sea-birds, or "miles away from anywhere" seeking a small animal or an insect. But his real interest is birds, particularly waders, and he has taken an official part in several bird surveys organised by the British Trust for Ornithology.

It is no hardship for Mr. Crabtree to rise—literally with the lark—and make his way to Red Rocks, Hoylake, on a sharp pseudo-summer morning and settle down, surrounded by mist, in a solitary wait for shelduck. This is, in fact, what happens when the association makes a bird count

of any kind. Members divide into small groups or take up solo positions at various appointed places along the river banks and keep a record of the number of the birds they see.

Until a short time ago, it is possible that a fellow observer on one of these counts might have been Mr. H. Forshaw, who sits just a few desks away from Mr. Crabtree. Mr. Forshaw is a vice-president of MNA and was, until recently, treasurer. Other A.T.E. members are Miss Betty Cushion, Accounts Department, Austin Ferguson, Sales Service, and Mr. T. G. Eastop, Department 412.

Bird-watching is an all-year-round hobby. Quite a lot of time is spent in the winter in indoor activities, the most notable being a series of talks held at Liverpool University. The thirst for knowledge is also quenched at week-end conferences held at Burton Manor. Further courses are run by the Workers' Educational Association. All these provide material for excursions the following summer and ensure that there need be no uninformed naturalists on Merseyside.

But this interest in wild life, which may seem to some rather serious and sombre, has its lighter and exciting moments. It is certainly no job for a sluggard. For instance, a popular event in the life of the association takes place every May—the attempt to time "the dawn chorus."

A party leaves Birkenhead on a certain Saturday to arrive in Ledsham at about 11 p.m. They then hike to a fairly large estate nearby where they have permission to make the survey. They also have access to a summer house in which some of them try to rest before the long wait begins. But the hard boards are not conducive to slumber and few are asleep when the whole party is stirred at 2.30 a.m. to take up their positions to await the overture.

The skylark must make the finest worm-catch: he wakes and starts his song at five past three—before light is even promised. Later the other birds yawn and rouse each other with full-throated songs. In the fields, foxes can be heard barking, and that rustle in the undergrowth a few yards away from the party sometimes heralds a rare, close-up of a badger. Only after the laziest bird has struggled with its first notes will the party put away their watches and binoculars and start the long trek home.

Think they are mad? Then you should try the excitement of one of these dawn chorus surveys. It is much more fun hearing early-morning birdsong



Bob Crabtree, an official of the local Association

this way than being in the state when you would hurl a shoe at the nearest tree in an effort to silence the cheerful blackbird who will not let you sleep. And this Merseyside dawn chorus is not an isolated incident. On the same morning, according to arrangement, naturalist societies all over the country take up their positions, time the songs, and then the findings of various districts are collated.

Bob has seen pied wagtails feeding on the Plating Shop roof at Strowger Works. On another occasion, he spotted a heron on the roof at Crawford's. Then, of course, there was the time when almost all the members of Department 68 and surrounding departments became bird-watchers when a tawny owl lodged in the building. The R.S.P.C.A. removed the owl, but, determined to be watched, the bird found its way back to the works the next day. It rested in a tree outside Purchasing Department.

Chat with these A.T.E. enthusiasts and it becomes obvious that their knowledge of wild life is tremendous. So, if you are of an enquiring frame of mind and you take more than a cursory interest in the world around you, why not join the experts and have fun finding-out?



John Crossley at work on an abstract at his house

### Life in the

## ABSTRACT

T IS AN ENVIABLE GIFT that enables one man to paint an almost living replica of what, to thousands of others, must be a memory that will fade with age. "But," says artist John Crossley, "since the advent of the camera the painter's art has become less sought after by the public and very few painters are in a position to command a constant income."

This is why John, who was trained for a career in the art world and who, in ten years, has built up a reputation as a painter of considerable talent, spends his days in factory machine shops and offices instead of in the attic studio of his Sefton Park flat.

Faced with the necessity of regular income, John took a job that was far divorced from painting. His choice was deliberate because he felt that a make-do occupation in the field of commercial art would prove more irritating than satisfying. So, from 8.30 a.m. each weekday morning, John forsakes his brushes and palette and becomes our Exchange Laboratories liaison officer, a job which

brings him into contact with nearly every section of the works at Edge Lane and our other factories in the Liverpool area,

Although John has tried to form a barrier between his work and the painting which has now become a hobby, he finds that even the noisiest piece of machinery can give him a subject for painting, particularly now that his trend is towards abstraction.

He has reached this stage in painting through an apprenticeship of still life, flower pieces, land-scape work, figure work and drawing and portraiture. "Throughout all these fields I have felt something missing and I now strive to capture this aesthetic feeling through abstraction, using paint rather like a building material which constructs and creates the aesthetic interpretation I seek." This unusual use of paint is the result of a great deal of experiment and it gives an almost three-dimensional effect of some modern sculpture.

To many people, abstract paintings are meaningless and ugly, but, as John says: "All art is a question of opinion." Even a painting looking like a patchwork quilt can carry a message. "The important thing is the poetry that is contained in painting. I make no difference between abstract painting and poetry."

John, who is married to another artist, formerly Miss Barbara Glass, of Publicity Department, has used his knowledge of colour and design to create a contemporary home. He has converted what was formerly just another flat with rather dull everyday decorating and furnishings into the type of home which would not be out of place on the Left Bank of the Seine or Chelsea.

Bright colour is the main theme for the décor and this is the perfect background for their contemporary furniture. Both he and his wife, who occasionally finds time to paint in between being a housewife and looking after their year-old daughter, use the studio. And, in a home shared by two artists, this is obviously the centre of the household. It has been designed as a room to relax in as well as a place in which to work. It has none of the untidiness usually associated with an artist's studio, but is bright with many coloured paintings and drawings and a variety of art souvenirs and collector's pieces.

In these surroundings John likes to work with music in the background. He is interested in both modern jazz and classics and his choice can be varied according to mood and the type of painting



Barbara and John relax after painting amid the contemporary surroundings in their Sefton Park flat

on which he is working. He finds that it is not easy to paint to order and his best paintings are executed on inspiration not drive. He produced a number of paintings of exhibition standard last year and had eighteen exhibited locally. So far this year, six have appeared in shows.

Although they are both talented artists, John and Barbara do not compete against each other, mainly because their interests in the different art trends are not always similar. Barbara's technique has been greatly influenced by Indian forms of art which she came into contact with while in that country some years ago. They do, however, have a common interest in sculpture and both carve in wood and model in plaster.

Because their art output is so great, John and Barbara sometimes find that they have no room in their flat to hang their paintings, but they overcome this by changing the canvases on the walls frequently—thus providing their visitors with a varying joint exhibition.

John, who looks every inch an artist with his Van Dyke beard, has the added advantage of being ambidextrous. Before joining A.T.E., he served with the 14/20 King's Hussars in Tripoli, where he was able to visit many sites of old Roman communities. His main interest was in the colourful mosaic floors which have since provided the basic ideas for a number of his abstract paintings.

Along with most Liverpool artists, John is greatly intrigued by the dockland area and can often be found sketching in water colours or oils in a setting of ships and quaysides with giant cranes and mountains of cargo in the background. He has not yet attempted an industrial scene at Strowger Works, but would like to do so in the future.



' The Hawthorns', the attractive bungalow built by Ron Holman in his leisure time at Aughton

## This is the house . . .

THIS IS THE HOUSE THAT JACK . . . sorry . . . that Ron built. It's a neat four-bedroomed bungalow, full of bright ideas and flanked by crazy paving. It should be made quite clear from the beginning that not only does the name of the builder differ from that of the eccentric nursery rhyme bricklayer, but that the tactics employed and the final results are very different, too. In fact, the only crazy thing about the entire lay-out, design and workmanship is the pathway.

The full name of this builder is Mr. Ronnie Holman, of Engineering Inspection, Strowger Works. He not only built the house, but he also tackled the plumbing, wiring, joinery and interior decoration. Why should an engineer, who has never had any construction experience, let alone training in the many skills required to complete such a task, suddenly decide to build his own home?

"Because I thought the estimates from builders for a similar type of house were extortionate," says

bluff but cheerful Ron. This and the grey depression promoted by the present-day housing situation, started him thinking. After all he had evenings and week-ends to spare, and-more importantendless energy and determination. So the decision was made. Mr. Holman had decided to build his own house . . . what next? The first, and most important step, was to find a plot of land to build it on and, as he and his family would be living there for many years, they wanted a perfect spot. Despite the raised eyebrows of friends they chose a country lane in Aughton. "This may seem to be well tucked away in the country, but the journey from Strowger Works can be made quite quickly, and once I am at home at night I can forget the hustle of the factory and enjoy the peace of the surrounding fields."

Next came weeks of impatient waiting and frustration while architectural plans were drawn up and approved by local authorities and the Ministry of Town and Country Planning. Building commenced in May 1955, and, with the prospect of good weather and long summer nights ahead, Ron started the real work of making his future home. There was no ceremonial for the laying of the foundation, it was started quietly and efficiently one night after he had left Strowger Works, had a quick tea and gone to the green plot of land. From then on there was no turning back.

During the weeks before the actual buying of the land, Ron had studied various aspects of the building trade. He discovered the most economic and hardwearing materials. "I sought advice from experts and followed it through. I decided they knew best, and their advice has certainly paid off. The house has been built at under two-thirds of the costs quoted when I made my original estimates."

The structure of the house grew with Ron's increasing knowledge of building. As he cemented brick on brick he encountered dozens of snags, but overcame them with the help of a friend. Night after night he worked until the failing light made it impossible to continue. As the house took shape and he clambered on the roof, helping to place each tile in position, the long light evenings which had been his standby for many weeks faded and he found it was already dark before he could reach the site. Eager to complete the work as quickly as possible, he erected floodlighting and continued the job under the glare of powerful arc lamps.

As each step of the construction was completed it had to be checked by the local authorities. It was at such times that Ron was given every assistance to help complete his work in as short a time as possible. As soon as they were informed, surveyors arrived to examine the work . . . sometimes after usual office hours and, on one occasion, on a bank holiday! "I was helped all along the line by local authorities, water and electric holdings. They helped me to keep the job going by laying everything on as soon as it was requested," says Ron.

When the shell of the house was completed, he started work on the plumbing, wiring and glazing, and then found a willing helper to assist with the joinery.

Although very much an amateur, Ron was wary of buying too much building material, which could lead to waste and unnecessary expense. He ordered in advance, renewing quantities as stocks petered out. Altogether he used 28,000 rustic bricks—

when you are your own labourer every brick can weigh a half hundredweight—and 15 tons of cement, which he mixed himself in a hired mixer. There were 10,600 tiles and hundreds of feet of timber

Mr. and Mrs. Holman and their two daughters moved into their bungalow in March 1956, just ten months after work started. Interior decoration was not then complete, but the house is now bright and airy with character and individuality which is the result of personal ideas being interpreted on the spot.

When the plans were first drawn up, Mrs. Holman was prepared to leave additional ideas for design to her husband, but she had one definite plea. "I wanted my kitchen at the front of the house, because I think a housewife can feel very cut off from life, spending the greater part of the day in a room tucked away at the back." Her plea was heard and she has an ideal housekeeping centre which has a lovely view of the front garden and farmland, with the hills of the Lake District in the background. This room has lots of spacious, built-in cupboards, and tables which fold back against the walls when not in use.

The main room of the house stretches the full length of the rear and is a combined dining-room and lounge. This is a sun-catcher with plenty of windows and French doors leading on to a terrace. Also downstairs are two bedrooms and a good-size bathroom leading from the entrance hall and corridor. Upstairs—and a complete afterthought—there are another two bedrooms and an additional cubby-hole in the tank room, which Mrs. Holman has converted into a sewing room.

Work is still going on at Hawthorns, which gains its name from the prickly hedge surrounding the long garden stretching to a main arterial road leading to Preston. Each night Ron tackles the wilderness of shrubs and weeds, which had to be ignored while the house was being built, and already roses and other colourful blooms are beginning to grow. An orchard, transplanted from a previous home, is bearing fruit. It is hoped that by next spring a lawn, fruit, flowers and a vegetable garden will be planted and beginning to provide for the family.

Would you like to build your own house? Do you consider you could master the arts of half a dozen skilled men? No, perhaps it would be easier to sit back and let the experts do it. But this is not Ron Holman's opinion—he'd do it all again!



Sir Archibald Gill with visitors to the exhibition

## Show Business

TAPLOW · POZNAN

NAIROBI

© NE of the most interesting exhibitions in which the Company has participated this year was held recently at Taplow Court, Buckinghamshire, the lovely Thames-side research establishment of British Telecommunications Research Limited. The exhibition was part of the Summer Visit to B.T.R. by members of the Radio and Telecommunication Section of the Institution of Electrical Engineers.

On show was a wide and representative selection of equipment made or handled by companies

within both the B.I.C.C. and A.T.E. Groups, although the emphasis was on apparatus produced at Taplow itself.

Taplow Court is a historic mansion set in a 30-acre estate, with attractive gardens and a famous cedar tree-lined walk. The exhibition, which featured 41 separate display pieces and approximately 300 items of equipment, was held under canvas with 4,000 square feet of floor space.

Sir Archibald Gill, Chairman of B.T.R., welcomed some 200 I.E.E. guests on the first day of the exhibition. A further 150 visitors, guests of Communication Systems Limited, saw the exhibition on another day. Representatives of B.I.C.C. and our own Group companies, together with relatives and friends of B.T.R. employees, also toured the show.

Some of A.T.E.'s latest equipment was also featured at the Poznan International Fair in Poland. One of the oldest trade fairs in Europe, this annual event lures exhibitors from many countries, who show products ranging from pins to giant haulage vehicles.

The A.T.E. stand, which took about three weeks to complete, was reckoned to contain the biggest display of working equipment in the telecommunications field at the fair, and attracted a great deal of attention. The representatives of the Company on the stand at Poznan were Messrs. R. Walsh and D. Raymont, of Strowger House, London; Jeff Cargill, Publicity Department, Warwick Holmes, PX Division; Peter Moore, Functioneers; and Mr. B. Macdonald, A.T.E. Bridgnorth Ltd.

The Company has had important Polish connections for many years and equipment is still being supplied.

Exhibition news from even further afield is that Automatic Telephone & Electric Co. (East Africa) Limited took part in the first Business Efficiency Exhibition to be held in Nairobi. Twenty firms showed the most complete range of office and associated equipment to have been on view at one time in East Africa.

It was agreed that the exhibition was a success and we received an encouraging number of enquiries. A new extension to Nairobi City Hall included two very fine halls which provided excellent accommodation for the event. It was particularly appropriate for us as the building is fitted with one of our 200 line type 211 private automatic branch exchanges.



The A.T.'& E. (East Africa) stand at the successful Business Efficiency Exhibition in Nairobi



A Commonwealth meeting at Strowger Works recently. Left to right: Mr. F. O. Morrell, Director (Engineering), Mr. W. O. Passmore, Managing Director, Automatic Telephones (South Africa) Ltd; Mr. K. M. Whyte, Managing Director Telephone and Electrical Industries Pty. Ltd., Australia; Mr. J. A. Mason, Director (Production); Sir Giles Chippindall, Chairman T. E. I., Australia; Mr. G. F. Perry, Managing Director A.T. & E. (New Zealand) Ltd; Mr. G. Bennett, Manager (Liverpool Factories)



Ruth Allday helped to test many wartime bombers

WOMEN AT WORK

### Deceivers ever?

A SAGE OF OLD once remarked: "Women are deceivers ever," How right he was. But that does not mean they deliberately try to deceive. Many do it quite unknowingly.

There is, for instance, petite Miss Ruth Allday, of the Gauge Room in Department 454 at Strowger Works. Looking at her five-foot-nothing set in a seven-stone figure, one cannot imagine her wrestling with the controls of a Wellington bomber on a war-time landing field. Yet that is exactly what she did on many occasions while serving with the W.A.A.F. During the war years she was one of the few women who qualified for the title "fitter" and helped to keep Britain's "Few" in the air. She was also one of the even smaller group of women who were ranked as W.A.A.F. Fitter Corporals, She worked on the refuelling and the fitting of new engines in bomber and fighter aircraft. Part of her job was to check the running of engines. "It was hard work, particularly for me . . . I'm so small. I was turned down when I tried to become a driver." Miss Allday made dozens of flights with test pilots to make her reports on new aircraft.

The intensive course in engineering which she took as a nineteen-year-old volunteer has stood her in good stead. It helped her to get a job with a difference at Strowger Works.

She is the only employee among thousands at the factory who does the key work in the gauge room. As a skilled gauge inspector, she does work which involves measuring to fine limits.

The word gauge covers various types of instruments—some simple, some intricate—used for measuring. The different parts of telephone equipment are mass produced, yet the function of each component depends largely on its exact fit with other parts.

Obviously, with mass production the speed of inspection in the departments must be quickened up and this calls for gauges set to required limits to achieve the perfect product. Gauges are made to accept or reject products, and, to ensure that the instruments are always true, they themselves are periodically submitted to exacting tests. Slip gauges used daily are checked against a master set and this comparison shows inaccuracies in size caused by general wear and tear. The master set is, in turn, checked by the National Physical Laboratory at regular intervals. One of the instruments used by Miss Allday is of particularly high sensitivity and capable of measuring to a millionth of an inch.

In her spare time, she is a Sunday School teacher. She also owns a motor-cycle which she uses for holiday travel and for visiting churches in various parts of the country.

## Far=away places

Many of the hundreds of young girls employed at factories within the A.T.E. Group of Companies have dreams of travelling and seeing the wonders of the world, but few of them are able to realise their ambition. One person who has, however, is Mrs. Annie Robertson, of Department 34, Strowger Works, who had been a stay-at-home girl for some years when she suddenly decided to bring a taste of adventure and excitement into her life. She became a stewardess with a large shipping line, and within weeks, she was off in search of the sun. The easy-going routine of her life at home was shattered as soon as she boarded her first ship the *Laconia*.

Now, as she sits at her bench, working on jack assembly, Mrs. Robertson has many memories and the details of the long hours she once worked are almost forgotten. Instead she remembers the thrill of being in the same ship as the late Aga Khan, of the light-hearted laughter of passengers as they caught the holiday mood during three-month cruises in the Mediterranean and the West Indies.

During the nine years she was a stewardess, Mrs. Robertson served in many well-known liners including the *Franconia*. All the trips started from Liverpool, her home town. Sea-sickness was something she mastered during the first days of her initial cruise. Afterwards, even during the roughest storms, everything was plain sailing for Mrs. Robertson.

Mrs. Robertson, who since the end of the war has spent her holidays getting to know England better, sometimes wishes she were back at sea near the millionaires' playgrounds of Bermuda and the Bahamas. "I think every young girl should see the world as I did before she settles down. If I were young again, I'd be off on the first available ship."

## Strictly for the girls

HAVE YOU REALISED that there are only two sections in the Sports and Social Organisation catering exclusively for women? The men have cricket, billiards, football and baseball, whereas the girls have the opportunity to shine only at rounders and netball.

When the Sports and Social headquarters was finished in 1950 Mr. Walter Lewis, the architect of Whitfield, feeling that the Strowger ladies were being left rather in the cold, so far as trophies were concerned, presented a cup, the Daphne Trophy, and instituted an annual inter-departmental rounders competition.

This year's final took place at Whitfield in July between teams from Power Samas and Engineers. Power Samas won the trophy after a decisive victory of an innings and seven rounders.

The girls from Power Samas, whose team have won the trophy for the past two years, get a great deal of fun out of their game. Like other enthusiasts they practice, weather permitting, for about a month before the competition begins. Their strongest bats include Elsie Tennant, Truda Barrington and Vida Strain.

Miss Bertha Meharry, Department 668, Strowger Works, has an annual headache as each May she tries to form teams to take part in the competition. "So many girls seem to think it is childish and too much like schooldays," says Miss Meharry, "and we have to struggle to find enough teams." Another unfortunate fact is that there are not often factory teams taking part in the competition although, this year, the girls from Machines Department reached the semi-final, only to be beaten by Power Samas. It is surprising not more girls are prepared to join in the fun.

### Cash contest

MOST WOMEN have a hobby, something they do while sitting by the fireside or listening to the radio. If you are one of the majority you will want to enter for this competition.

All you have to do is to look through the knitting you have done during the past year and pick out any garments made for a woman or child, from no more than nine ounces of wool.

Sew on to your knitting a label certifying it is your own work and bearing your full name, department and home address and send to Valerie Evans, Publicity Department, St. Vincent Street, Liverpool 3.

After judging by a knitting expert three prizes of £10 (first), £5 (second) and £2 10s. (third) will be awarded to the winners.

Judging will be based not only on regularity of knitting, but also on originality of design and styling.

The competition is free to enter and is open only to members of the A.T.E. Group of Companies. Every care will be taken of items submitted, but no responsibility for either loss or damage can be accepted by the organisers, whose decision on all aspects of the competition must be regarded as final. Internal or external mailing systems may be used. Entries should be wrapped neatly and securely. Each competitor may submit up to three garments. All material received will be returned after judging.

Closing date for the competition is October 17th.

