

Lionel Kreps starts new life in USA

Friday, 2nd February was the date for an informal gathering in the Southgate canteen to enable friends and colleagues to say goodbye to Lionel Kreps who has left Tektronix U.K. to take up the post of Manager of the Accessories Division of Tektronix Inc. at Beaverton.

Some 80 people representing all departments spent a very convivial evening during which Ed Morrison presented Lionel with a book on the State of Oregon.

Lionel thanked all present for their help whilst he had been with the Company and also those who had contributed to the gift of a decanter

and coasters presented to him earlier in the day.

Lionel joined Telequipment in 1961 and has spent all of his time with the Company on design, seeing many changes as the Company has grown and become part of Tektronix. As Chief Development Engineer he oversaw the design of the successful Telequipment range of low cost oscilloscopes, including the latest D1000 range.

We wish him every success in his new job and hope that he and his family enjoy the new life to which they are going.



Ed Morrison presenting a book on Oregon to Lionel.



Lionel Kreps and family with Ed Morrison and John Shafe.

See what you've never seen before

Once in a while, Tektronix brings out a new oscilloscope so far ahead of everything else that it must be regarded as a special event.

This has just happened with our new 7104, another in the highly successful 7000 series, which makes measurements never possible before.

One of the ever-present problems facing scientists and engineers is to be able to measure what happens during very short intervals of time, such as those met with in nuclear reactions, laser pulses and solid state physics. These time intervals are in the region of a thousandth part of a

millionth of a second, where a pulse of light will have travelled less than twelve inches from its source.

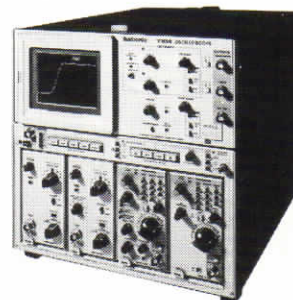
Measurements of this kind have previously called for very complex techniques involving high speed cameras and special photographic processes because direct observation on a screen was not possible – the trace being virtually invisible even in a darkened room.

The 7104 changes all that. Its trace is a thousand times brighter than anything else working at these speeds and, for the first time, it allows the operator to make the

measurements directly on the screen and in normal room lighting.

This leap forward stems from major advances in many crucial design areas, notably in the manufacture of faster integrated circuits, new printed circuit board and connector techniques and, above all, in some highly advanced cathode ray tube developments.

The 7104 reinforces Tektronix leadership in oscilloscope design and even at its price of around £15,000 we expect to receive many orders for it from U.K. customers in the near future.



Well done girls!

Here are photographs of a presentation from Ed to the field secretaries who participated in my eight-week training course.

The course consisted of eight one hour lessons on general Tektronix products, including 7000 series, TM500, logic analysers and spectrum analysis.

Each girl who attended received a prize, but the first prize went for overall expertise, the second for the greatest effort and the third for the greatest improvement. In that order, they were awarded to:

- 1st Jane Willett
- 2nd Julie Roberts
- 3rd Debbie Step

The remainder who participated were Wendy Dyer, Vanessa Cottrell, Chrissy Nicholls, and two girls from Southern Region, Jan Biddle and Debbie Reese.

*Ray Ganderton
Harpenden*



Ed Morrison awarding Jane Willett 1st prize.



Julie Roberts receiving 2nd prize.



Debbie Step receiving 3rd prize.

Ron and Peter win awards

On Thursday evening, 7th December, 1978, Tektronix apprentices were again to the fore at the Enfield & District Group Training Association Award evening, held at Theobald's Park College. Ronald Donoghue was presented with the William V Pearce award for the most outstanding technician apprentice and Peter Mason received an award for the most progressive first year technician apprentice. Both apprentices are to be highly commended for their efforts and resulting achievements.

Seen presenting the William V Pearce award to Ronald Donoghue is Mrs. W. V. Pearce.

The Mayor of Enfield was present to award Peter Mason with his prize.



A shaggy dog story

For as long ago as I care to remember I have always had a dog of one breed or another. But it wasn't until about fifteen years ago my wife and I decided to take a more serious look at dog breeding and showing purely as a hobby, and whilst on holiday one summer in 1964 in Dorset we visited a championship dog show in the New Forest just as spectators. We found this very interesting and this decided us to have a go ourselves. So after a little more thought we bought our first Show dog, a Black Bitch we named "Sheba" from a well known Dorset breeder, and some time later that year we joined the Home Counties Cocker Club. I should say here that we chose Cocker Spaniels as a breed because we both like gun dogs and we both agree that Cockers are our dogs.

We went to our first show as exhibitors at a little village in Hertfordshire in late '64 and learnt a lot about our dog, it was too big, not trimmed correctly, not trained correctly for the ring. So undaunted we set about training, trimming and learning how to handle and "Show" an animal. This and several shows later brought us our first card (that's a place in the first four) of the class you are showing in, and so we went on, of course we had our disappointments you can't win 'em all, but all in all we enjoyed our dog shows and the animals response in the ring.

This then makes the handler and dog a team, which is a must in any animal showing. Our next step was to try our hand at breeding! An interesting subject. Starting with the search for a suitable sire, that is to say a sire, with good all round points, short-back, good bone structure, straight coat, dark eyes etc. and of course the correct blood line, this is



most important to keep the Pedigree true. When the sire is found you make suitable arrangements to have your Bitch sired when the time is right.

Our first litter of pups arrived from our Black Bitch "Sheba", there were eight pups, Black and Golden. So I had to set about making a kennel for mother and family. I converted the garden shed but soon learnt this was inadequate. So when the first litter were sold I remodelled

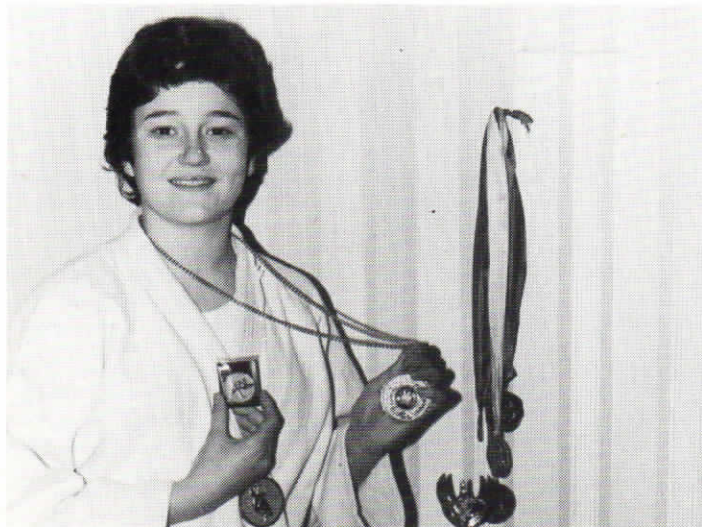
the kennels and enlarged the area and installed heaters and light so that now we have a well established dog quarter. Since these early days we have raised many litters of pups, both "solids and parti-colours". Solids are all one colour, whilst Parti-colours are black and white or orange and white, or black, white and tan.

Our dogs are now in many countries in the world having exported pups to Spain, Italy,

France, Israel and other countries as well as a great many counties in this country. As you may guess sometimes our phone seems to never stop ringing with enquiries for pups, advice on what to look for when buying etc. Anyway that's another subject we will chat about that at some time in the future.

Part 2 next issue

*John Burrows
Goods Inspection, Hoddesdon*



Success follows success

On Sunday 4th February 1979 at Crystal Palace National Sports Centre, Sarah Ripsher (daughter of Stan Ripsher, Supplies Manager who is also her coach) won the National Young Womens Trials (14-18 years age group) in the under 48 Kg. Judo category.

At 14, this is a considerable achievement. Many of her opponents being 2 to 3 years older. This latest success makes her number 1 in the Great Britain Young

Womens squad at her weight, and really means that she has won the Great Britain Championship.

The latest success follows successes in the Eastern Regional Open Championship, the Essex Championship, the Hertfordshire Championship and a very near miss in the German Open Championship last year. With the possibility of womens Judo in the 1984 Olympics, have we got a name to cheer for?

So you want to be a Salesman

Ask any youngster, of say nine or ten, what they want to be when they grow up and, provided they do not mug you for your insolence, the answer may be a lorry driver, engine driver, policeman, fireman, doctor, carpenter or even aeroplane pilot. It would be most unusual to hear salesman mentioned, or should I say, sales-person?

For some inexplicable reason, selling is a job which does not find its way onto the school's careers list. The reason for this may lie in some of the unpleasant connotations that the average person assigns to the very job title.

One cannot help thinking that people have a mental picture of a salesman as a down-trodden door-to-door pedlar offering goods from a battered suitcase, or perhaps a quick-talking bomb-site car dealer, complete with an out-of-date suit and a top pocket full of blank M.O.T. certificates, and of course we must not forget the market trader with his canvas covered stall and more bargains than you would have thought possible. Such associations with the term salesman can only be considered as a very narrow view, since the work is befitting to anyone who offers something tangible or otherwise in exchange for reward. In general, we expect the latter quantities to be goods or services in exchange for money.

If we agree with this definition, we can see clearly that many different

people, not considered to be connected with selling at all, would qualify admirably for the title. A wife or girlfriend, for instance, can be an exponent of the art, especially if the stakes are high. Gentlemen, just think how many times you have been persuaded to do something that initially was the furthest thing from your mind. A successful lady will have "sold" her idea to her companion in exchange for that strange quality that women possess when they want their own way. To be truthful, we are all salesmen, except some of us earn a living by it, and some do not.

One possible reason for the absence of selling in a school's curriculum is that a pre-requisite for a successful selling career is a thorough technical grounding in the area in which the selling will eventually take place. For instance, if a person wishes to sell medical products, a background in medical science would be mandatory. Let us assume, for the purpose of this article, that a career in electronic engineering had been chosen. At some time during the early stages of the post-apprenticeship period, say between twenty-five and thirty years of age, a person with a desire for selling will find themselves at the proverbial crossroads of their career. The engineering route offers various structures:— Design, Development, Manufacturing, Quality Assurance, etc., and in the

case of selling:— Support, Market Development, Direct Product Selling, Product Sales Specialisation, Management, etc.

Many would say that selling is where a white coat and soldering iron are replaced by a suit and briefcase. It is true that direct connections with the physical aspects of engineering are left behind, but these are replaced by an intensive study of the areas relative to the aspects necessary to sell the product. For instance, these may be a sound knowledge of the market, operation and application, the ability to find possible users of the product, gain successful introduction, converse and demonstrate the products usefulness at the right level, and of course to eventually take an order. In addition to this, a salesman will need many other qualities. He will need to be self-motivated and not easily perturbed by failure. He or she must feel at ease in the presence of total strangers, appear confident under all conditions, be able to answer all the important questions immediately or later, maintain a level head when under the most strenuous conditions (some customers can be really trying).

A model salesman will know when to talk and when to listen; when to arrive and when to leave. The most severe change for the newcomer to sales is the structure of the working day. At the factory, the day is

usually well-defined. There is a time for beginning, a time for rest breaks and lunch, and a time for going home. Work projects are normally well-scheduled and progress can be easily monitored. There is nearly always someone with whom to share a problem. Selling is entirely different. A salesman is a one man business.

The daily schedule is precise but flexible. The day begins when the customer says so and often finishes in the same way. Before and after customer visits, time is spent preparing and summarising and preparing again for the following day. Firm start and stop times do not exist. There are no fixed breaks or lunch "hours". Time is also needed to get up to date with new product and applications knowledge, new sales areas and strategies. Sales figures must be monitored, target and order plan predictions must be made, and reasons why must be given if they are not. Long-term business activity and an up to date knowledge of competition is of paramount importance.

In front of a customer a salesman is always relaxed but never relaxed, always honest but never naively so. A reputable company will expect a salesman to conduct himself in a manner commensurate with the Company's image. This will most certainly mean a clean and tidy appearance, a suit, shirt, tie and shoes that are not at an extreme of the prevailing fashion: well-spoken, clear diction and good manners will also be sought. If travel is required to sell the company's products a car will be supplied and all company expenses reimbursed.

A new car for nothing sounds very attractive but how many office or laboratory people fall in love with their desks. Not many, I'm sure. A motor car to a salesman is little more than a mobile desk and despite the humorous comments of Mr. X, Y, Z in the Christmas issue of "Tek Times" not all company cars receive the treatment he describes.

A career in selling can be very rewarding if taken seriously. It is not a game as some may suggest, but a vital link between manufactured goods and end user. Not many products sell themselves, directly or otherwise. They need selling, just as the customer expects to be sold to. A product without a customer is like a body without life.

I hope my brief description of sales and salesmen has not deterred anyone from seeking the career. Nothing is quite what it appears from the outside. I know and wouldn't change it for the world.

Ray Ganderton Harpenden

Carolyn drops in

Late last summer Carolyn Swedberg was on holiday in the U.K. as part of a European holiday tour. Carolyn 'phoned and asked if she could see our manufacturing facilities in the U.K. and we were delighted to show her around.

Carolyn works in the Transformer Shop in Beaverton and her smiling face is pictured here.

Carolyn, thank you for calling.

*John Shafe
Southgate*



Judo: Muscle or Magic

Most oriental martial arts tend to be surrounded by mystique relating to their exponents and the incredible feats they can, apparently, perform. Television and motion pictures must take their fair share of the blame for this popular belief. One man fighting off hordes of screaming bandits, brandishing razor sharp machetes is about as believable as Annie Oakley punching a hole through a quarter dollar bit with a Colt '45, at fifty paces.

Fortunately, judo is one martial art which has managed to retain respectability and avoid exaggerated claims. Even so, many still believe that a qualified JUDOKA (person practicing Judo) can out-match the aggressive advances of anyone, regardless of size and strength. This is, to some degree, a fallacy; a ten-stone black belt is no match for a twenty-stone navy. However, in defence of the sport, the navy would be well advised to consider the consequences of over-confidence. Judo is a Japanese art of unarmed defence and attack. Its literal translation is 'the gentle way'. Judo began in Japan in 1882 when a Dr. Kano began teaching his developed art. Since then the sport has gained healthy popularity throughout the world. The first British person to gain the coveted black belt was Mr. E. J. Harrison in 1904. The highest possible grade in judo is 12th Dan. (Black belt, unspecified, is equal to first Dan). The highest grade achieved in the world is 10th Dan and is held by a Japanese gentleman: Mr. Kyuzo Milfune. The highest grade achieved by a British person is 6th Dan. Mr. Dave Starbrooks holds this grade and won a silver medal in the 1976 Olympics.

I began judo at the tender (?) age of eighteen, but like most things at that age, I didn't take it seriously. However, I managed to attend a year of classes but didn't take any gradings since these were held invariably on a Sunday morning: at eighteen, Sunday mornings were reserved exclusively for recovering from Saturday nights!

Last year, some twelve years later, I started again. You may ask 'Why judo?'. Well, there were a variety of reasons; not least of which was exercise. In twelve years my weight had increased from twelve and a half to fourteen and a quarter stone and fitness from 'reasonable' to 'pathetic'. Spending half my working day behind a steering wheel doesn't help. I thought about Rugby again but without glasses I can't even see a pitch let alone the ball. Squash seemed the sport of the moment and so I gave it a try. After a few months hard practice a close friend challenged me to a one-hour



session. He played left handed and with one eye closed and I still lost every game. The following morning I lay paralysed in bed with what felt like a slipped disc. I have not touched a squash racket since.

Sifting enthusiastically through the wide range of energetic pastimes available today, I came up with two alternatives: home-brewing and judo. The former seemed ideal but alas, before the infamous 'Boots' was in sight my wife threatened me with everything with the exception of divorce (blast) and so down from the loft came my dusty judo suit. I joined a club and soon my first night arrived. I dressed hurriedly, trying to appear calm and confident, amidst every belt colour, bar white. I introduced myself to the chief instructor, a fourth Dan black belt with a vice-like handshake and a pair of shoulders that would be the envy of any fifteen stone bull-mastiff. Before practice, some time was spent warming-up. Having previously looked upon severe exercise as two consecutive games of snooker, the fifteen minutes that followed made me think the dear Lord was making an early call. If this was warming-up, what on earth was going to follow?

For beginners, this was 'Ukemi', - that's Japanese for breakfall. Every act in judo has a Japanese name and, to my horror, progress was impossible without its learning. Breaking a fall is necessary to prevent one breaking anything else.

It consists, basically, of smashing the left, right or both arms against the canvas mat a split second before body contact. The judo mat is made from various materials but usually dense, single particle, compressed foam about 1" thick and cut into sheets about 3' x 6'. Several of these make up a mat and are covered by a large canvas sheet.

If you possess razor sharp reactions and timing, which I don't, you can hurl yourself, with gay abandon, and land as if the mat was an eiderdown. In reality the mat felt like concrete and I lost more breath than I thought possible. Looking around me the others seemed to be enjoying this, some were even smiling. Thirty minutes of 'Ukemi' is enough for anyone; twenty-five minutes too long for me.

The next torture on the menu was 'OGoshi', a major hip throw. This is where you throw someone to the ground by pulling them head first over your hips. The instructor chose me for demonstration as I was the heaviest present. 'No point in making it too simple for him' I thought. I had barely finished the thought when the floor became the ceiling and vice-versa. Left arm flailing, to prevent a broken back, and chin tucked tightly in, I hit the floor like a bag of wet cement. The instructor, emphasising the importance of 'Ukemi', pointed out that he had given me support but in contest this would be absent! I was perspiring as if a main water tank

inside me had burst a valve. Training finished with the ceremonial bow and I breathed a sign of relief. The instructor asked me if I had enjoyed the light practice and hoped I would return the following week for some serious work. I nodded, not daring to indicate anything but yes!

The first evening was last February, 1978, and since then I have begun to enjoy the sport a great deal. I'm now an orange belt and will be attempting a green in March or April. There's more to judo than hip throwing your opponent. The basic syllabus consists of twenty-seven techniques including many arm, hip, leg and shoulder throws, plus strangle and chokes and various hold-downs used during ground fighting. Progress up the judo ladder is signified by different coloured belts. White indicates a novice. There are seventeen further grades; five primary ones called Kyu's and twelve secondary, called Dan. The Kyu grade colours, in ascending order of ability are yellow, orange, green, blue and brown. Similarly the colour of the first Dan grade is black. Up to the fifth Dan the colour remains black, markings on the jacket indicate the specific Dan. From sixth to eighth Dan the belt colour changes to red and white stripes; changing again from ninth to eleventh to red, and finally at the twelfth, back to white, indicating a complete circle of achievement.

One of the many attractions of judo is its adherence to formality. It is almost religious in some aspects. There are various protocols which the new Judoka must learn quickly to avoid embarrassment. For instance, there is respect for higher grades. For instance, before walking on or off the mat, the judoka in charge (usually the highest grade in attendance) must be approached for approval. A ceremonial bow is used frequently, at the beginning and end of any act i.e. practice, contest, arrival and departure.

Judo is a technician's sport for all ages from five upwards, where speed and technique outweigh anything else. Strength is helpful, when all else fails, especially on the ground but invariably a successful attack does not leave time to apply strength in place of technique. I've met some really interesting people at various clubs and I intend to continue with the sport as long as I'm able. I leave you with a quotation from the master:—

"Freedom is continuous change! The heart should rely on God-like speed and courage."

Kyuzo Milfune 10th Dan

*Ray Ganderton
Typing: Linda Kay
Harpden*

“Such a drag having customers”

It all started many years ago when I was a rather young, very enthusiastic and extremely inexperienced electronics engineer. I was employed in a very large firm in SE Essex and had occasion to visit the stores to obtain three transistors for the department's latest prototype.

“Sorry,” says the storeman, “but I've only got three left and I can't let you have those in case somebody wants them!”

On another occasion I was sent to Birmingham to commission a prototype computer and realised whilst on site that I needed two dozen 100k resistors. On contacting a well known distributor (why does my heart always sink when I hear the inevitable female voice?), I was told that there was no possibility of getting such things unless I knew THEIR stock number!

Mind you, this sudden depression which overcomes me was caused by an incident that occurred whilst I was designing a remote controlled mag-tape deck.

I needed some brakes for the spool motors and not knowing what material to use, I telephoned a company well known for their car brake advertisements.

“Technical advice department,” says a female voice. “Can I help you?”

“I wish to ask some technical questions,” I reply.

“Go ahead,” she says.

“They are very technical,” I insist.

“That's all right,” she confirms.

So I proceed to explain my problem, telling her about the dimensions and torque involved. When I had finished she said, “Yes, I understand all that. Now if you will tell me the MAKE and YEAR of your CAR, I can tell you which part number you will need.”

I have had just the same trouble from the male variety.

“Sales?” I inquire into the telephone.

“I beg your pardon?” says an educated male voice at the other end.

“Sales,” I repeat, “You know, where they sell things.”

“Oh yes,” he says, “you must excuse me, I am new here. I will go and find out for you.”

He goes away, but returns shortly, “Yes,” he says, “this is the sales department.”

“Oh,” I comment, wondering if I am still asleep in bed.

“Yes,” he repeats, “can I help you?”

“I wish to purchase six meters,” I state cautiously.

“Part number?” he inquires.

“XYZ-22,” I continue a little more enthusiastically.

“A moment please, I'll check stock.”

A delay, and then, “Excuse me, sir, but how do you spell hyphen?”

You can laugh, but it's not your phone bill. How long do you wait on the telephone while the sales staff check stock; five, ten, fifteen minutes? Would you hang on if the money were coming out of *your* pocket?

While we are on the subject of that hard earned commodity, do you know how much the components you purchase really cost your company?

Forget, but only for a moment, the cost to your company of actually raising a purchase order, whilst I relate an incident which occurred between myself and the purchasing department of a London electronics company employing me at that time.

I needed some tantalum capacitors which I knew were likely to be expensive, so I filled in an internal requisition for only six off. Some days later a junior from the purchasing department telephoned and asked me what I thought the price of 50µF 12V capacitors would be, and not realising that she was referring to my order, I told her about 12p each. Eventually I received an internal acknowledgement of order from the purchasing department and was delighted to find that the cost of each tantalum capacitor was only 12p.

So I promptly increased my order to 100 off. Three weeks later I was summoned to the boss's office and asked to explain away a bill for £387 for capacitors!

Iniquitous

However, I digress, does your purchasing department buffer you from the iniquitous cost of post and packing?

I sent an order for 25 transistors costing 25p each to a distributor in the South Midlands who provide an otherwise excellent service.

They sent 12 transistors plus £1 p&p. Then two transistors plus £1 p&p, then two more transistors plus £1 p&p. Then I cancelled the rest of the order, as they were now costing me 43p each.

Have you ever been caught on the Pro-forma invoice game?

It goes like this: “Hello sales, can you supply us with “x” goodies? We don't have an account with your company.”

“Yes, ex-stock, please send a cheque or shall we pro-forma invoice?” Either way, after your company's cheque has been cashed, you receive an acknowledgement of order: delivery 12 weeks. So you

should care; you would if it was your money.

Then there is this stupid nonsense of trade references. Do the accountants really believe that we are going to refer them to people to whom we owe money?

I know of at least two companies who never pay anybody until the day before they are summoned to court. That is except for a couple of firms to whom they are as good as gold, in order to use them specifically as trade references.

For heaven's sake, if a new firm asks you to supply them immediately with less than £50 of goodies, supply it and ask for trade references later.

Then there is the “It's so distasteful having to sell our own products,” sub-syndrome.

“Please, I would like to purchase some of your goodies.”

“Sorry Sir, you will have to go through our distributor, his number is...”

Another telephone call: “Yes we are the distributors, delivery on this item is sixteen weeks.”

I only get caught once: I used to favour one manufacturer's resistors and faithfully recommended them in all my developments.

Then one day they said, “Sorry, little man, we have committed our next three years production to the TV industry.”

That was many years ago, but that company's products are still at the bottom of MY list when it comes to purchasing.

Do you believe in fairies? I am talking about the little ladies with wings and a magic wand. Sometimes they take a full page spread in our favourite technical magazines, showing some marvellous new device which is just what we all want. When we telephone the number at the bottom of the page; funny nobody knows anything about it!

However, I place on average one order every working day and except for a few well tried firms and distributors I know that when I put out my hand to pick up the telephone I am likely to have to fight hard to persuade the sales staff to sell me what I want.

Sensitive

If you are the managing director of a company and you have access to an outside line, have you ever tried to place an order with your own company?

If not it is about time you tried, but before you do ask yourself “What is the most important task my company engages in?” And if your answer is anything other than

maximising profits give yourself instant dismissal.

Then ask yourself “Who is the most important person in this company from this point of view?” Because you are soon going to find out.

Right now, pick up the phone.

1 Brr brr, brr brr, brr, brr.

1a Is the silly girl never going to answer? I've got better things to do than sit here all day.

2 “Hello, what do you want, ICs? Is that animal fodder or consumer goods?”

3 “Hello, goods inwards here, No sorry. I can't get you back to switchboard, you'll have to ring again.

3a In this game you must now try to place your order with your most hated competitor.

4 “Hello, sorry, all lines to sales are engaged. Will you wait?”

4a You are paying for this call out of your own pocket – you decide.

4b If you decide to wait, think what your customer might be thinking.

4c If you decide to phone back, you must try your second most hated competitor first.

4d Why is your switchboard girl not encouraged to take your name and telephone number, so that your sales department do not lose this order? Because you are trying to cut down on your phone bills? Instant dismissal again please.

5 “Hello, sales here. Do you have our stock number? No? I'll send you a catalogue.”

5a Phone your third most hated competitor.

6 “No we have not got this item. No I can't suggest an alternative and our technical adviser is not in. Shall I get him to call you?”

6a I'll lay odds you will never hear from them again.

7 “We are expecting the goods in about a fortnight, as you do not have an account with our company, please send cash with order.”

7a You are not to part with your money unless the goods are in stock! “Can you let me know when your stock comes in?”

7b I'll lay even better odds you never hear from them either.

8 “Yes we have these items in stock, price is £x.

8a The price is 15 per cent higher than the man's down the road. You are only to place an order if the sales person actually says, “Would you like to place an order?”

I sincerely hope that the result of reading this treatise of one purchaser's experiences will make the sellers more sensitive to the feelings of the purchasing houses.

After all we have lots of money to spend. Don't YOU want some of it?

POT POURRI

The magic of 9

Here are three effects using the odd properties of the figure 9.

Effect 1

Ask someone to write down a three digit number.

ie 328

Ask them to reverse them and subtract the smaller from the larger.

ie 823
328
495

Ask for the extreme right hand figure (ie 5). Now you can tell them what the total is.

The answer is simple, the middle figure is always 9 and the outside figures always add to 9.

example 743
347
396 always adds to 9
always 9

Need I say more.

Effect 2

Hand someone a calculator and ask them to punch in the figures 1 2 3 4 5 6 7 9 (note no 8)

Ask them which figure they dislike writing, ie say 5.

Multiply this figure by 9 mentally (ie $5 \times 9 = 45$) and ask them to multiply by the answer to the mental calculation (ie 45). And the answer shown by the calculator is the figure they don't like (ie 5555555).

Effect 3

This uses the same principle but is a little more complex.

1) Ask someone to write a five digit number,

ie 73428

2) You write the answer to the sum about to take place by — subtracting 2 ie 73426 and placing a 2 at the front.

ie 273426

Write this answer on a separate piece of paper and keep hidden.

3) Ask spectator to write another five digit number under the first.

ie 73428
47253

4) You write a five digit number underneath to bring the 2nd row of figures to 9.

ie 7 3 4 2 8
 $\frac{4}{5} = 9$ $\frac{7}{2} = 9$ $\frac{2}{7} = 9$ $\frac{5}{4} = 9$ $\frac{3}{6} = 9$

5) Ask spectator to write another row of five figures underneath.

73428
47253
52746
13892

6) You write another five digit number to bring the 4th row of figures to 9

ie 73428
47253
52746
13892
86107

7) Ask spectator to add up and the answer will be as predicted.

ie 73428
47253
52746
13892
86107
273426

Pete Green, Hoddesdon

Mind blowing

Effect

An ordinary drinking straw is cut in half and placed upon a table about two inches apart, performer rubs his forefinger on the table between the straws and the straws will scamper away from the forefinger in opposite directions.

Method

When everyone's attention is on the straws, bend your head over the table and blow gently at your finger as it moves between the straws. Cigarettes or ping pong balls can also be used.

The patter I use is as follows: "Russian scientists are investigating people who claim that they can move objects by mind power (telekinisis). I have been conducting some experiments along similar lines. Let me show you what I mean, here is a straw and I'll cut it in half and place each half upon the table. Now watch the straws very carefully! (this is almost a command and prevents the spectators seeing you blow onto the finger), now everyone concentrate hard and try to move the straws by sheer mind power (the straws fly apart). That is mind over matter, you don't mind I don't matter".

Note:—make sure everyone is watching the straws before blowing.

Pete Green, Hoddesdon

Speak up for Britain

London has the world's largest insurance market, the largest proportion of the Euro-dollar market, and a larger listing of overseas securities than any other centre. Also, the City is a world price indicator for important commodities like lead, copper, fur and diamonds — and is one of the world's leading bullion markets.

FACT: In 1975 our exports to other members of the EEC rose by 16 per cent. Exports to the oil exporting countries rose by 95 per cent.

FACT: In the first quarter of 1976 we sold goods worth £5,818 million — or £64 million a day (£12 million a day more than in the first quarter of 1975).

FACT: Our total export earnings in 1975 were £30,327 million — about £1,250 for every working person!

FACT: Private 'invisibles' have been in surplus for 180 years — and the City alone earns over £900 million a year.

FACT: The USA is our biggest market, taking £1,756 million in 1975.

Salesmanship

Someone once said that the only time the British ever did any spirited selling was when they sold whisky! Well, we do earn about £326 million from overseas Scotch sales — but

such sayings give a very wrong impression of Britain's selling style.

British salesmen can boast a fine record.

For instance British companies have recently sold:

Oil to the Saudis, Marraccas to Caracas, Kites to Japan, Tom Toms to Nigeria, Sand to Arabs, Pasta to the Italians, Chow Mein to Hong Kong, Prayer Mats to Mecca . . . and Water to Gibraltar.

FACT: The store with the world's fastest moving stock is believed to be Marks and Spencer's in Oxford Street, London.

The Big Time

We still do things in a big way. Among the things bustling Britain can boast are . . .

The world's largest bicycle factory . . . the world's largest brickworks . . . the biggest chain of chemist shops (1,322 branches) . . . the biggest shoe shop.

We do the small things well, too. A Midlands firm produces what is by far the world's smallest tubing — with an outside diameter of only 0.0005 of an inch!

Adventure . . . and Endurance

. . . Has always been one of the greatest British characteristics. The list of heroes, ranging from polar

explorer Robert Falcon Scott to Capt. Matthew Webb the first successful Channel swimmer (21 hours 45 mins), gives this country an unequalled place in mankind's roll of honour.

In this modern world, Britons still take their place among the giants who take some of life's toughest challenges head on.

FACT: The late Donald Campbell still holds the world speed record for a wheel-driven car (429.311 mph in 1964) . . . and the highest unofficial water speed of 328 mph which he achieved in Bluebird K7 on its last ill-fated run in 1967.

FACT: Among the ranks of the world's greatest athletes must number Roger Bannister — who achieved the first four-minute mile (actually 3 minutes 59.4 secs) at Iffley Road, Oxford, in 1954.

FACT: Sir Francis Chichester became the world's most famous modern-day sailor in 1966-67 with his solo circumnavigation of the world in Gypsy Moth IV. He covered 29,600 miles in 226 days).

The Games People Play

It's a sporting world . . . and where would it be without the British? Games that fascinate millions the world over were developed in these islands.

Take FOOTBALL . . . still spreading in popularity and even now making an invasion of the U.S. Association football was adopted formally in Cambridge in 1848; the games controlling body, the Football Association, was formed in 1863.

GOLF: Originated in Scotland where, for centuries, it has been known as the Royal and Ancient game.

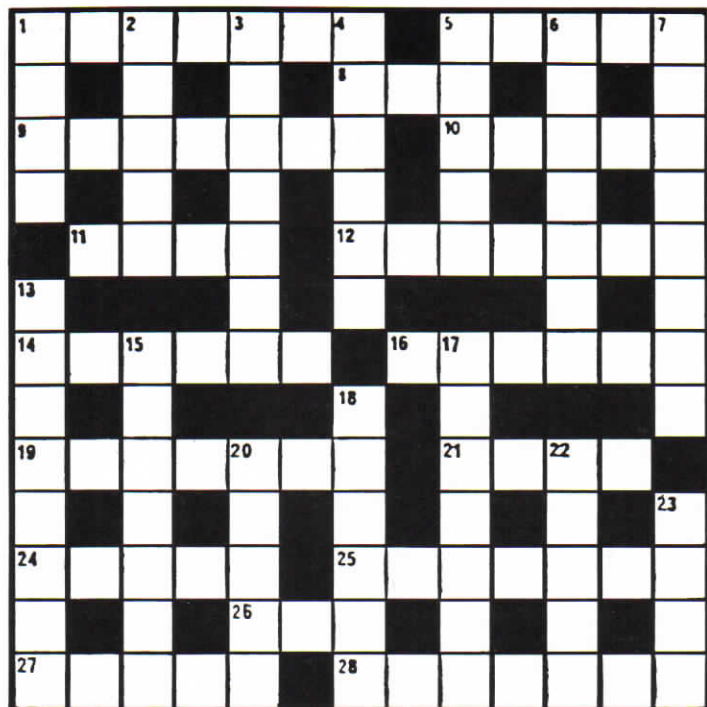
BOXING: Probably originated in England in Saxon times. The modern sport — adopted in many countries — dates from 1865 when the Marquess of Queensbury drew up rules to eliminate the ugly side of ruthless prize fighting.

CRICKET: Known to have been played at Guildford Grammar School as early as 1550. The Marylebone Cricket Club, founded in 1787, became the governing body; the MCC still retains world-wide responsibility for the game's rules.

MOTOR RACING: British drivers — men and women — enjoy an unsurpassed reputation throughout the world. More racing cars have been built here than in any other country.

RUGBY UNION: First played at Rugby school in the mid-19th Century. Rugby League, the 13-a-side professional version of the game, was instituted in 1895.

POT POURRI



ACROSS: 1 Useful; 5 Store; 8 Egg; 9 He destroys the chances of winning; 10 African tribe; 11 Girls name; 12 In a state of decay; 14 Score without hitting ball; 16 Artists workshop; 19 Extremely large; 21 Between change of bowlers; 24 Turnips north of the border; 25 Distinguished; 26 The same; 27 Fertility in the desert; 28 Twisted.

DOWN: 1 Suspend; 2 Affixed to denote contents; 3 Deceptive; 4

Defensive leather covering for chest and back; 5 Pole used at Highland games; 6 Harmonious result of Anglo-French technology; 7 Mixture containing oil and water; 13 Highly coloured tropical bird; 15 Small boring tools; 17 Pig's foot; 18 Exercises the mind; 20 Duplication of 27 across; 22 Sharp bend; 23 At Rest.

*Devised by Bob Orrock
Product Control Hoddesdon*

RESULTS OF ISSUE 4



RESULTS OF ISSUE 5



Estate Agent

During a recent excursion to Imperial College, London to show the 7104, our man on the spot, Peter Bavage was almost backed into in the car park. Getting out to ensure that no damage had been done he recognised the other driver as a member of the Oceanography group. Knowing them to be interested in

small portables Peter changed gear from 1GHz to 4MHz and performed a demo of the new 305 on the tailboard of the Cortina estate. The College rang the office to say they will be ordering. How's that for a fast sell?

*Dave Fynn
Maidenhead*

Letters to the Editor's desk

Dear Ed,
As an avid reader of the "TEK TIMES", I write to ask if it might be possible that pictures appear with 'name tags' for the want of a better expression.

In the last issue, for example, Ray Ganderton was featured in a long article about motor bikes but unfortunately there was nothing in the article to tell me it was Ray. For us out here in the sticks it would be nice to know who contributes to our in-house mag.

Secondly, the article that appeared on the Maidenhead office, was somewhat confusing. It was

stated in the write-up that Val worked for Dave, but low and behold the pictures printed below was of Dave and myself. If the picture had been labelled it would have been clear to readers who have not met us.

Also, while I'm at it, is there any chance that the answers to the crosswords might get printed in the following issues as I for one can never finish them and would like to know where I go wrong.

Many thanks for a super magazine.

*Jan Biddle
Maidenhead*

WHOOOPS!

Sorry Jan - remiss of us

However, just to put the record straight, we've re-published pictures of the Maidenhead Identikit with names, together with the issue 4 crossword results.

Good luck with the latest crossword and thanks very much for writing and the interest shown,

which will ensure we keep on our toes.

We would also like to apologise to our friends at Hoddesdon, Alan Bull, Maria Calvino, Brenda McCandless and William Care whose names we misspelt at the long service award luncheon issue.

The Editors



Debra Rees



Val Hansford



Jan Biddle



Dave Fynn