TEK TOPICS



Volume 3 Spring 1976

Heres wishing

U

Very Happy Easter

to

Everyone

THIS AND THAT

Easter for most of us is a welcome break after the dark days of winter, with the promise of the warm, sunny, summer time. A time when we traditionally give each other Easter eggs, the egg being symbolic of the earth's fertility, once again providing our needs and originating from the pagan "Spring Festival of New Life". Easter also has to be the most important time in the Christian Church calendar.

Whatever our beliefs however, this time of the year brings the promise of summer vacations, evenings on the cricket pitch or tennis court, or maybe a boat trip in pursuit of some elusive fish.

Most important to all of us, for these things to be meaningful, is the promise of continued customer demand for our products, so that we can be assured of full employment during these doubtful economic times.

A lot of strategic planning has been going on at Tek, commencing from corporate level and reaching into all areas, and there is the confidence at this time that our order book will continue to provide for us all.

We have again seen a problem with our incoming freight arrangements. B.I.A. reported that this was not an economical activity, and wished to withdraw the service. Consequently we have again changed the route, this time involving Air Bridge Carriers, who are airfreighting cargo for Tek. Limited and Tek. Guernsey Limited from Castle Donnington to Guernsey.

Just as a flash back to Christmas, I think the 'do-it-yourself' catering scheme was a big success, it was difficult to see the difference in some tables before and after the meal, they were still groaning under the weight, so were some people! It took some of us oldies back a few years when we used to celebrate in this way, not to mention one Christmas when King Hanley cut off everyone's tie with drawing office scissors and pinned his trophies on the notice board. I remember he replaced them with new ones later.

You will have read in Area Rep. minutes that we are planning a Tek picnic this year. Favourite spot is Herm, as in past years, but we are always interested to hear of alternative ideas.

For those who are interested, the "Lorry Driver of the Year" competition will be held at La Villiaze in our car park, on 23rd May.

Although there is nothing to see on site yet, work continues on planning the new building at La Villiaze. Site levels have been measured and recorded, and trial holes have been made to determine the load bearing properties of the soil.

Not a bad idea come to think of it, the thought of ending up with a structure at an angle of 45° would cause some problems even to marketing people!

FRED BIRTWISTLE RETIRES.

To many of us the word 'retirement' has but little meaning --- it gets talked about occasionally at Area Rep meetings and it is an entry on our pay cheques. For some of us it is something which is approaching with increasing speed but is still, as yet, some way off.

But for a few people it is just around the corner --- one such person is Fred Birtwistle, who retires on his birthday, the 28th May, 1976.

Fred has had a varied career particularly before he came to Tektronix and TekTopics was recently able to prise from him a few reminiscences about his earlier working life.

Living as he did in the north of England it was only natural that Fred should start his working life in the main industry of that area --- the cotton mills, at the princely sum of 12/4d for 50 hours work.

His father was a mill manager and it was decided that Fred would train to eventually step into his father's shoes. Life was hard in those days and the accepted cure for any misdemeanour no matter how small, was a swift clip around the ear --- manager's son or not.

This couldn't have done too much harm however because Fred had soon acquired a thorough understanding of all the mill machinery and was soon a supervisor in charge of a number of women.

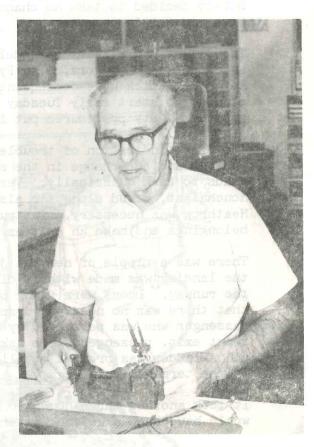
The second world war came and with it the need for the direction of labour and Fred found himself looking for a job. Feeling like a change he got himself a job in the farming industry driving a tractor.

His bosses soon discovered that Fred's tractor never needed any maintenance, due to his loving care and once again he became a supervisor with men and equipment in his charge.

Then one day Fred and his family while on a holiday in Dorset, decided to visit Guernsey on a day trip. The next year their annual holiday was spent here and they decided that this was the place to live. Very soon he'd started at Tek and most of us know the story from them on.

In his leisure time Fred has been very much an outdoor man and there are not very many sports he has not taken part in --- hiking, biking, climbing, potholing, running, jumping, you name it, he's done it --- he's even played lacrosse!

There comes a time of course when one has to give up such strenuous activities and Fred's interest now, and has been for many years cinematography.



Even here his leadership qualities were recognized and he was for some time President of the Guernsey Cine Club.

Probably his greatest love is for steam engines and he'll arrange his holidays to coincide with traction engine rallies.

So here we are, not at the end of the story, but at this moment in time when we at Tektronix wish you, Fred, a long and enjoyable retirement.

DRAMA OVER HEATHROW

Here is an account sent to us by Keith Retallick of some anxious moments in the air.

"Crippled aircraft makes an emergency landing at London Airport as fire takes hold of an engine on a packed Guernsey flight last Tuesday, February 10th. Amidst the smoke and confusion.....etc."

Strange how rumours start! The facts are seldom so interesting. Actually there was no smoke, no panic, only an engine warning light which indicated an emergency situation and the British Airways captain of Viscount flight BE8416 decided to take no chances and make a hasty return after only five minutes in the air.

The flight had already been delayed overnight due to fog on the Island and four Tek. Managers, Alan Pywell, Diete Bedke, John Thompson and Keith Retallick were consequently late for the management training course planned to start early Tuesday morning. They were interested to see the airline safety procedures put into operation when the emergency occurred.

The first indication of trouble came when one of the starboard engines was cut and the change in the sound inside the cabin caused a number of heads to turn quizzically. Very quickly, the cabin crew, trying to be nonchalant, moved along the aisle to explain that an immediate return to Heathrow was necessary. Instructions were given to leave all personal belongings and make an exit as soon as the aircraft came to a standstill.

There was a ripple of nervous jocularity for the next few minutes but the landing was made without difficulty, the aircraft stopping just off the runway. Doors were flung open, but by this time it became apparent that there was no need for desperate measures, and apart from one male passenger who was persuaded by the cabin crew to slide down a rope by the front exit, passengers were asked to remain in their seats until a fireman's ladder was brought to allow a more dignified departure; so back to the terminal buildings.

It took another three hours to reach Guernsey; by this time, Wells Fargo would have been a welcome alternative.

ALTERNATIVE TECHNOLOGY

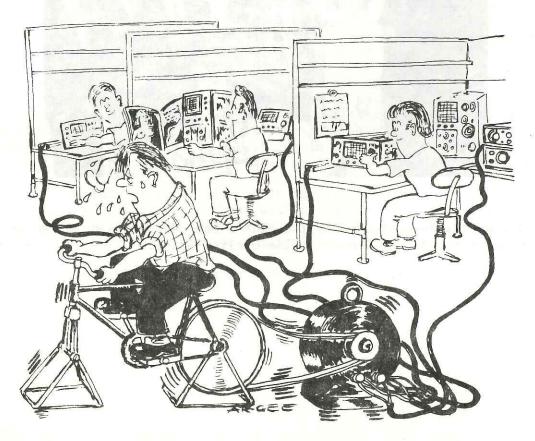
There is an old Chinese curse, "May you life in interesting times". We, for our sins, are living in interesting times. Whatever happens in the immediate future, there is no doubt that in the life-time of most of us we will see severe shortages in food and energy resources.

Few communities in the world can be as vulnerable in the changing world of the twenty first century as our own little Island of Guernsey. We do not produce enough food for one third of our population and our principal industry of growing tomatoes, depends for its prosperity on burning oil to heat structures seemingly designed to ensure maximum heat loss. Oil will be too valuable a raw material to be used for heating in the coming era.

With this prospect before us do we see any serious attempt to face these problems of the future? No, bland complacency is the order of the day. Who should be giving the lead for the search for solutions to the dilemmas of the twenty first century (no, it is not too early to worry about the twenty first century, if we don't think and act now, we won't have the lee-way to act in 40 years time).

The ideas must come from the young and those conscious of today's and tomorrow's need for technology. We can't go back to a peasant economy, we must go forward to a new alternative technology.

Where can the young and the technologically conscious be found in any concentration in Guernsey? Where, but at Tektronix? So, how about embarking on a bit of future planning? I'm sure there must be some dormant ideas just waiting an opportunity for an airing, and I'm equally sure that Tektopics will give space to any contribution no matter how far in the wild blue yonder. Let's get brain-storming, and see what we can conjure up to minimise the problems of future generations.



GUERNSEY CINE CLUB ACTIVITIES

In addition to pen and ink, TekTopics contributor Ralph (AR-GEE) Gilday, likes to express himself through the lens of a cine-camera.

Ralph - 6th from left in the picture is not the only Tek who finds movie-making an absorbing hobby.

Also shown in the group are Peter Guilbert (Comp. Eval) extreme left, Chairman of the Guernsey Cine Club, and Mike Falla (IGI) 3rd from left.

Ralph has made a number of films including live-action, close-up and cartoon all of which have won trophies in club competitions over the last year. Mike Falla in particular is to be congratulated in winning a trophy with his first ever entry into a competition.

Not present in the photograph but nevertheless an active member of the club is Fred Birtwistle (TQ). Fred was for a number of years President of the Guernsey Cine Club, and his filming activities around the plant on the day before the Christmas shutdown bear witness to his continued enthusiasm.



The trophies were presented by the club's patron, Lady Arnold, on the occasion of the Annual Dinner at the Carlton Hotel.

FISHING TACKLE RENOVATION

You can recognise the angler at this time of the year as he starts wearing his Guernsey and yachting shoes, his instrument manuals are replaced by his tide tables, his car is usually parked as near the exit as possible, and people who usually cadge a lift from him lose their enthusiasm, as his car rapidly acquires that well known angling "pong"!

However, when that hardy single-minded individual sets out on his first trip of the season he is probably due for a bit of a shock. That rod he used to catch his record bass with, is in all probability in a very sorry state. The beautiful reel is now stiff and full of salt. That supposedly transparent nylon is now a dirty white rough material. The purist will say, "If you wash all your gear down with fresh water after each trip, it will last a lot longer".

True! But after several hours on a heaving boat, chucking weights, hooks and lines (and as like as not the contents of his stomach!) into the sea it is a very dedicated angler who remembers to wash down his gear.

Here, for the benefit of the many are a few hints on tackle renovation. I will deal first with the rod, there are four main problems that affect rods, and the worst is undoubtedly a set of worn and grooved rod rings. These are worn down by rough nylon line and once a groove is formed it serves as an ideal cutter for a new line. To avoid losing fish and expensive tackle it is good practice to renew these as soon as any wear is noticed. A broken piece of whipping can catch the line as you cast and will often give such a strong jerk as to break it, resulting in more lost tackle.

The last two problems are a direct result of salt corrosion, merely seized ferrules and a locked winch fitting.

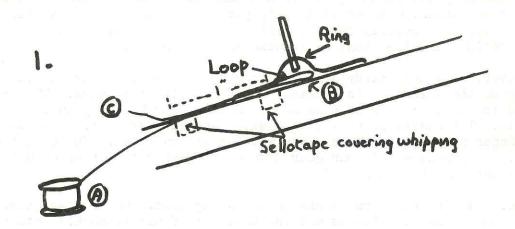
If you decide that rod rings or whipping needs replacing it is best to strip the whole rod and start from scratch. Using a sharp razor blade, carefully cut loose all the rings, if the rod is solid fibre glass use a piece of fine sandpaper to remove all the traces of varnish and fish scales. A hollow glass rod should not have this treatment, as the smooth outer surface is very thin. Mark the position of the rings accurately. Sand down the butt ready for re-varnishing or painting, and check the winch fitting for smooth operation. If it is completely seized and a drop of pentrating oil will not free it, try wrapping a piece of cloth around the locking nut and place the winch fitting in a vice. Very carefully turn the rod until the nut is free. Clean the thread with oil and a soft brush.

Check the ferrules for corrosion. If the section will not engage firmly and easily, clean out the sockets with oil and a piece of dowel rod. Never use an abrasive as the only result will be a loose fit, and as every angler knows this means the possibility of losing a section when casting.

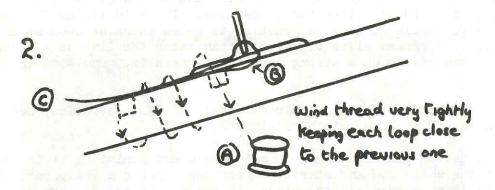
Anglers often regard whipping as a difficult job, it is relatively simple.

with plies and full gently until the loop is unside the whiteing. This ends.

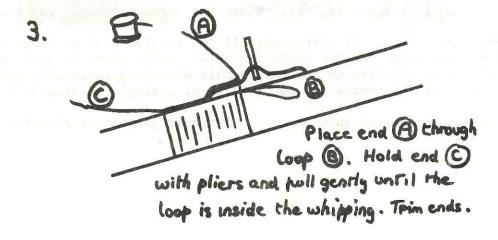
Place the first ring on the rod ensuring that it lines up with the winch fitting. Secure it with a piece of cellotape. Make a loop of whipping thread and place it as shown in Fig. 1.



two pieces of cellotape should hold the loop in place. Proceed to wind the thread on the rod as in Fig. 2, keep the winding as tight as possible.



When you reach the top of the ring support cut the thread and place it through the loop, Fig. 3. Holding the lower end of thread with a pair of pliers pull firmly until the loop is approximately under the midpoint of the whipping. Trim all the ends neatly and proceed to the other end of the ring.



When all the rings and whipping have been replaced, mask the ferrules and rings with tape, and spray or brush with clear varnish. This not only makes a neat job, but the varnish seals the whipping onto the rod.

With the rod now ready for use, it is time to tackle the reel. If you are not very mechanically minded this job is best left to experts. Modern reels are sometimes quite complex and there is nothing more frustrating than a bit left over when the reel is re-assembled!

The spool should be removed and if the line is rough and white, it should be discarded. Using emery cloth clean the edges of the spool to remove any rough spots. Remove all the retaining screws on the side plates and immerse the reel in white spirit or detergent and water to dissolve all the old grease.

Now you should be able to see the works! Remove the gears and ratchet arm and clean the interior with a brush and detergent. Inspect all the teeth for damage and check the shaft for corrosion. Renew the spool washers as these tend to rust easily and rebuild the reel. Wash it in fresh water and dry thoroughly. Repack with a good quality grease. If the bail arm is grooved and it is not possible to replace it use a fine file to renew the surface.

The jumble at the bottom of a tackle box should be sorted out, all floats should be checked for splits and snags, and if necessary repainted with bright colours.

Pierced bullets should be re-pierced with a drill. Any angler will know the frustration of a bunged up bullet hole!

Any hooks showing signs of rust should be discarded, having been safely wrapped in a piece of cardboard. Mass production of hooks often results in badly formed eyes. Repair or throw away any hooks with rough edged or unclosed eyes.

Unfortunately fishing is not so cheap these days, sand-eels and squid are very expensive, and difficult to keep satisfactorily. One fairly well tried method is to sprinkle the sand-eels or squid strips with salt, roll them in strips of newspaper, ensuring that adjacent baits do not touch and place in the freezer of your fridge. For the sake of good family relations use a couple of polythene bags to contain the bait, as sand-eel flavoured cheese and milk are not everybody's favourite diet! These baits will keep indefinitely and when opened will look very natural.

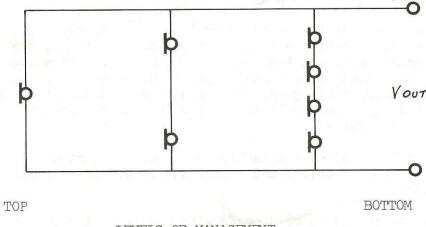
If you have followed these hints you are probably ready for the season, a season that will bring wet bums, head colds, nagging wives and hopefully full fish boxes!

'WE NEVER CLOSED'

Our reporter asked the engineering group what would happen if there were to be an electricity cut.

The engineers said that consideration had been given to this problem and they were investigating a source of untapped power.

The intention would be to place microphones around the conference room table, and use the audio output resulting from management meetings. They said they thought a series parallel combination would probably result in maximum output arranged as follows:-

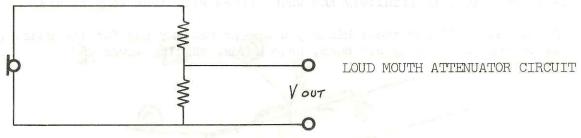


LEVELS OF MANAGEMENT

This arrangement was the result of much research that showed each level of management talks twice as loud as the next lower one.

When our reporter (who has some technical appreciation) asked the engineers about possible phasing problems, the engineers thought there would not be one as most members of management all said the same thing at the same time therefore phasing form factor and frequency would provide signals that would be additive at all times.

There was a problem with some managers in particular whose output was significantly greater than the rest, causing some unbalance in the system, but this problem could be overcome by an attenuating circuit.



When questioned as to the level of output expected the engineers could not be precise, but thought that sufficient kilowatts would be available to heat a number of soldering irons. Maximum output was expected when pay problems were being discussed.

Guernsey has one of the best youth services in Britain, and when you realise that this high standard has been achieved in the past few years by a band of voluntary workers, comprising of ordinary people like ourselves, this is probably a good thing, because the people who are interested in helping are not just after pin money. When looking around the rest of Britain it is straight away noticed that nearly all other youth workers are paid, including a lot of members who just go for the fun anyway. Guernsey has one paid worker, he is Brian Watts who was appointed as Youth Officer in January, 1975 by the States of Guernsey. His job however is too complicated to go into here.

In the Island there are over 45 registered youth groups, this does not include uniformed organisations such as the Boys Brigade, although many are registered. These groups range from hundreds of members such as the Capelles Methodist Youth Club, down to church groups with maybe 10 or 11 members. Most have adult leaders, but many depend upon help from the members themselves. Many are in fact run by 18 year olds and are just as successful as others run by adults.

To help bring the clubs together there are local committees many of which are affiliated to national bodies. There is also an Island Members Council and two representatives from each club meet every three months to organize many activities which include sports, arts and crafts and courses in leadership. These take place annually in October, in Herm, when 40 - 50 members who are prospective leaders spend the week-end discussing topics which affect the community, usually having guest-speakers from England to help the debates.

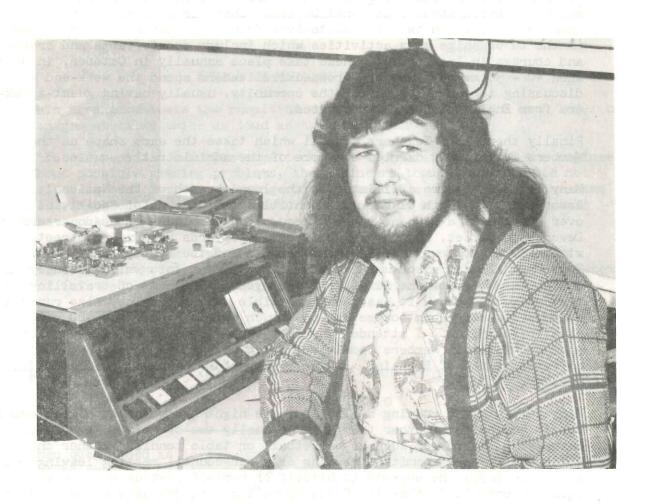
Finally there is a Teachers Council which takes the same shape as the Members Council but carries out more of the administrative duties.

Many local clubs are affiliated to the local branch of the National Association of Youth Clubs. This entitles them to hostel facilities all over Britain at a reduced rate. These places include the headquarters in Devonshire Street, London, which is some 300 yards off Oxford Street, and within 10 minutes walk of Madame Tussaud's and the Post Office Tower. This organization also runs national competitions into which Guernsey is hoping to enter for the first time this year. The cost of travelling is immense so up to now it has been impossible to enter. They also run cou courses like our Herm course but on a much larger scale with 400 people usually attending. I attended the last one in September, and was elected onto the National Members Committee, which has ten members representing different parts of Britain. I myself represent the Channel Island's and Greater London.

Many people think running a club is a one night or two night a week event, but it goes a lot further than that. Usually two or more nights involve inter-club activities such as basketball or table tennis, another one could easily be a committee meeting or a sub-council meeting leaving the worker to enjoy the weekend to himself or herself (let us not forget equal opportunity), that is if you haven't got to get away to England or Jersey for some meeting or competition. Guernsey have beaten Jersey in most things over the past couple of year - naturally!

Apart from being tired it's nice to "relax" on club nights and have a "quiet" game of table tennis. Various clubs provide a vast range of sporting amenities or simply a place to sit and chat to your friends. I would like to mention before closing that different clubs have different age structures and anyone is usually welcome provided that the club can cater for the extra numbers. If any of you have children of club age, between 9 and 21 years old and do not know where your nearest club is, I would gladly supply you with the information, during coffee break of course! Or if you prefer it, look on the Tek notice board for the booklets which have all the information you need for finding out where the nearest club is, who runs it, their phone number and what nights they meet etc.

There are many Tek employees who are engaged in this kind of work and who would help you. For example Tony Martel helps to run the Capelles Club, Gordon Robilliard who now operates at Les Camps, having recently moved from Le Bourg, Paul Fletcher and Paul Mariess who help at the Vale Road Youth Centre, also ex-Tek Mike Moore who has been responsible for St. Stephen's re-opening after being forced to close. This proves of course that their are many people of different walks of life who are helping the community, and hopefully will continue to do so.

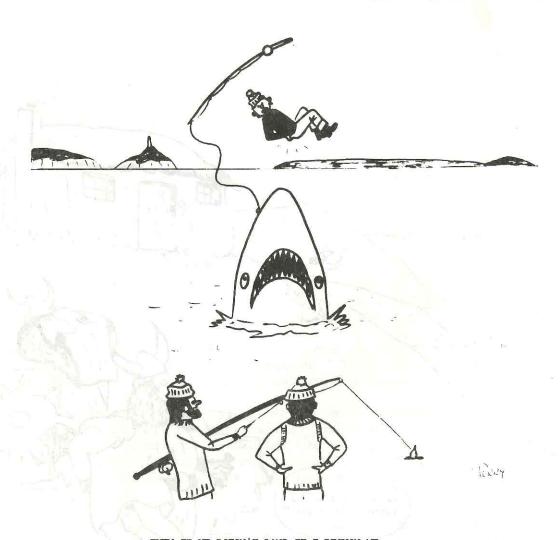


Martyn Hallett who contributed the foregoing article is the Leader at the Vale Methodist Youth Club,

Chairman of the Members Council of the Guernsey Association of Youth Clubs, and Vice Chairman of the Members Council of the National Association of Youth Clubs (the whole of UK). This latter position involves attending meetings at either Nuneaton or London, one weekend every month.

Martyn won the Guernsey Final of the Lions Club "Youth Award" competition and represented Guernsey at the Regional Finals. The Lions Youth Award is given primarily for Community Service.

I wonder what he does in his spare time? - Editor.



EVEN IF HE DOESN'T LAND IT I RECKON WE SHOULD GIVE HIM "FISH OF THE MONTH".

LETTER TO THE EDITOR

We received a letter from Nick Humphries, Tek. Limited, giving his opinions of the Autumn issue of TekTopics. He says that he found This and That, Sunflower Competition, Safety at Tektronix and Shakespear's Ode to a Cyclist particularly interesting.

He goes on to say that he would be interested to read anything to do with Tektronix manufacturing or marketing in Europe and Japan, he would like to see a description of a different international Tek. location and its function in each issue. He would particularly like to know more about the Sonytek operation.

As a P.S. to his letter, Nick says that TekTopics is read in Beaverton, and he has received an IOC from Ron Wambolt in which he said, "I really enjoyed reading the discussion with you in the Autumn issue of TekTopics".

We shall certainly be trying to get more information about other Tek. locations in Europe - Ed.



WHY ALL MARINE BIOLOGISTS SHOULD VISIT GUERNSEY

How many times have you muttered to yourself as you've sat cold and miserable with a bit of drowned bait on the end of your line----"There's no b---- fish around here"?

You've set out some hours before, fresh, sprightly of step, the look of the hunter in your eye and a vision in your mind of that great hunk of bass you are about to catch, anticipating the moment when it is sizzling in the frying pan.

And now you sit, the dampness and the coldness seeping into your bones, trying to convince yourself that there must surely be one hungry fish somewhere within a two-mile radius.

Well, this article won't help you to catch more fish, but it will at least assure you that in fact the sea and shores around here are teeming with life although not necessarily suitable for the frying pan.

All told there are about twenty major groups of animals----these are known in biological circles as phylla---some of the more well known ones being the sponges, the worms (three or four groups) the arthropods, molluscs, vertebrates to mention but a few.

That relatively small area between low tide and high tide which is called by the scientists the littoral region is unique in harbouring more representatives of more of these major groups than any other ecological area in the world.

Even the tropical rain forests are not as rich in different species of the animal kingdom. Because of this generalisation it is usual for all zoologists to be familiar with the species of the littoral in their own part of the world regardless of their own specialization. Especially important are the needs of the zoological students.

But why Guernsey?

Well in most factors that are important to the littoral zoologist, Guernsey is superior to other possible sites for a number of reasons.

- 1. Guernsey has a large tidal range therefore there is a large area of shoreline available for exploration. There are places with larger tidal ranges but not many and not by very much.
- 2. We are in a Temperate zone----Arctic marine faunæ have the largest amount of animals but the smallest number of species. On the other hand the tropical marine habitat has the largest number of species, but (in spite of popular belief) has a smaller amount of animals. The temperate zones of the earth have a beautiful compromise of these two extremes.

The reason for these two extremes is due to something called a non-permanent thermocline----an explanation of which is outside the scope of this article.

- 3. Guernsey has a wide variety of types of shore, sheltered and exposed, sandy, muddy, rocky, shingle, steeply sloping, gently sloping etc. This is important since each shore type has its own kind of animal which differs to a greater or lesser extent to the others.
- 4. Guernsey has (within easy reach) a shoreline which faces all points of the compass, this to a smaller degree than (3) above, specifies the animal spectrum present on any stretch of shore.
- 5. The Channel Islands are in an unusual position inasmuch as they are bang in the middle of the rather fuzzy borderline between two major animal group areas. In practise this means that we are at the most northerly part of the range of some Mediterranean species (e.g. the ormer) and at the southernmost limit of the range of many of the arctic and sub-arctic animals.
- 6. So far everything said here applies also to Jersey, BUT---Jersey is surrounded by shallow water and her littoral species are therefore limited. Guernsey has much deeper water not very far to the west and her marine faunæ list is enriched to a surprisingly large amount. For example, a type of arrow worm, half an inch long, transparent and not really a worm but which is very important to the marine biologist as a marker species and whose real stamping ground is the deep Atlantic is found commonly in Guernsey waters, but is virtually absent from the Jersey scene.

So there you have it, all you fishermen, next time you're sitting there with nothing in your bag, think of the billions of animals teeming about you, it might take your mind off the lack of bites. Come to think of it, maybe that's the reason that the fish aren't hungry!!

The Stank-Age Teks

by AR-GEE



CRICKET NEWS

A Tektronix batsman has been selected for individual cricket honours by the Salemites Cricket Club.

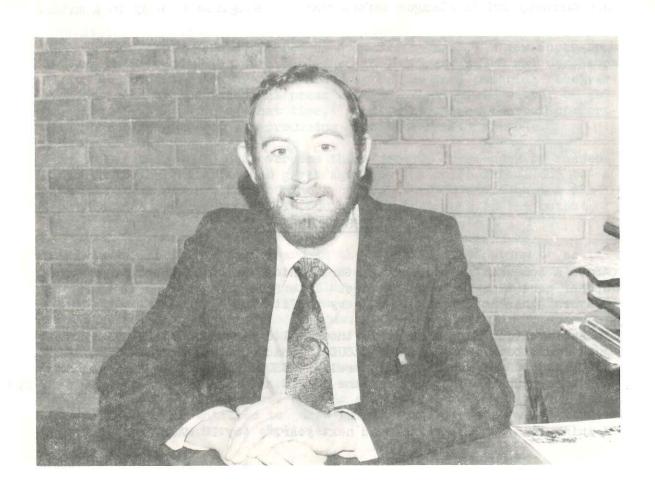
The Salemites are a group of lads from Salem Methodist Youth Club who play in the Guernsey Cricket League Division II. They decided to inaugurate individual awards to players in each of the four Divisions, who achieved the best aggregate for batting and bowling.

Tektronix are currently in Division II having suffered relegation in 1974 and it was a pleasant surprise to learn that Rex Martel had been awarded the batting aggregate trophy for that division.

Rex, Production Services Supervisor, has opened the Tek innings for many years. Recently he has merged consistency with his attacking style and finished the 1975 season with an aggregate of 559 runs!

Always an exciting player to watch, Rex's favourite stroke is a straight drive but he has a full range of strokes in his armoury.

Several other Tek cricket players joined Rex at the informal presentation evening which was rounded off by some excellent cricket films.



The 1976 AGM of the Cricket Section was held in February and once again there was a firm move to set up a second cricket team to play in the bottom division. This old chestnut received a thorough airing as enough people appeared to be willing to play; the more experienced club members felt that two teams would still result in problems due to non-availability of players.

At the time of the meeting it was not known if there were to be three or four divisions this year. Four divisions would result in fewer matches for each team and this was felt to be the ideal situation. The meeting therefore decided that a 'B' team would be formed providing the Cricket League adopted a four division set up.

Bill Presland (TQ) was elected Secretary/Treasurer and Mike Falla (IGI) the 'A' Team Captain. The captaining of the proposed B team was left in abeyance until the Leagues were formulated.

Subsequently the four division format has been adopted and so, for the first time in four years, Tek has two cricket teams.

The 'B' team approach to their cricket has traditionally been one of enjoyment first, success later, and a few ales after the match!

With this in mind if anyone would like to try their luck at evening league cricket they are asked to contact Mike Falla (IGI) or Gary Wallbridge (7000 Group) as soon as possible. All players have to be registered with the Guernsey Cricket League before they are eligible to play in a match.

NEW BUSINESS VENTURE FAILS

After a somewhat disconcerting start Eunice Walton has decided to wind up her part time business venture. Interfumer (motto "Say it with Players") has not proved to be very profitable.

In an interview Eunice said, "I thought I'd made a LUCKY STRIKE, but it just faded out like a PASSING CLOUD. I had good contacts in PICCADILLY, KENT, MARLBOROUGH and several foreign CONSULATES and EMBASSIES but they all turned CRAVEN on me. Even the GUARDS and the Navy (the SENIOR SERVICE) lost interest.

I think I'll send books instead next year." (by DU MAURIER of course!)

STEAM RADIO

These last few weeks have seen the hundredth anniversary of the telephone invented by Alexander Graham Bell. Those of you who subscribe to the Sunday Times will have seen the picture in the magazine section of the "gallows" telephone of 1875. Mr. Bell would surely gaze in wonder at the present day version of his invention, to see for instance someone in Europe rotating a disc by inserting a finger in holes corresponding to a sequence of digits, to finally establish a connection with someone on the West Coast of America, with a quality of transmission similar to that of 'phoning one's next door neighbour.

I wonder though what would be the sentiments of Professor J.A. Fleming, inventor of the thermionic diode in 1904 destined to be the forerunner of the thermionic triode and other multi-electrode devices, capable of signal amplication. He would find that time had described nearly a full circle by physicists determinedly and successfully achieving virtually the same amplifying results from semi-conductor materials originally discarded as incapable of amplication.

Maybe it is fortuitous that the old semi-conductor doomed to be no more useful than that of a detecting device was not seen to have the potential of amplication at that time, thus condemning the thermionic valve to a life of "never was".

Those of us who are old enough to remember, can't help smiling and reminiscing when browsing through old editions of F.J. Camm's "Practical Wireless". People were staggered by John Scott-Taggert's new Super-Gram de luxe details of which were published in 1934, and which was demonstrated at "Radiolympia" that year. Claimed to be the most powerful receiver ever designed by the technical press with an output of 12 watts, or as Mr. Scott-Taggert said at that time, "About sixty times that of comfortable room strength, but yet producing exquisite purity of tone."

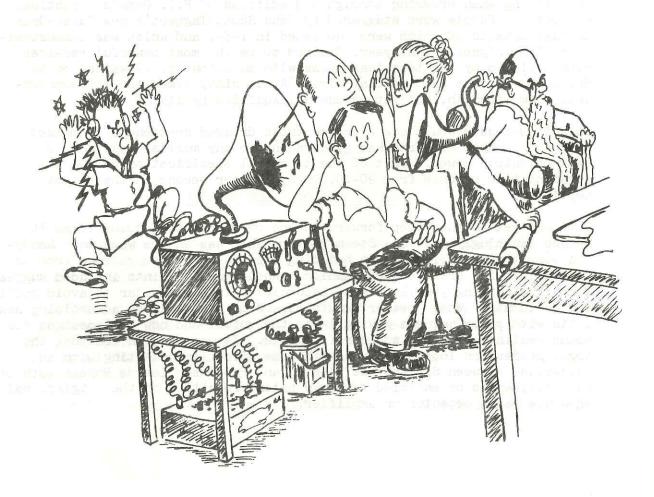
This it was said would now overcome those dreaded crescendos of massed instruments that hitherto had given agony to any musical soul due to lack of output power. Part of the technical specification quotes a straight line reponse from 20-10,000 cycles per second in the output amplifier.

This was yet another step forward in the development of sound or as it became laughingly called - Steam Radio. This was an era when most handymen were trying their hand at building one, two or three valvers from the blue prints in "bread board" fashion. When magazine hints included suggestions like putting your lead acid accumulator in a glass jar to avoid spilling accidents. When speaker manufacturers of the day were advertising new units with super magnets giving twice the volume and new coil designs for sound realism and other added refinements. It was also an era that the legal profession looked back on with some affection, starting with an occurrence between Sir Ambrose Fleming and Professor Lee de Forest both of whom claimed to be entitled to draw patent royalties on the original valve when used as a detector or amplifier.

Other patent actions were started over the use of reaction, a positive feed-back system that became regularly used with frequent disturbing whistles in the pre-detector circuits to increase sensitivity and selectivity.

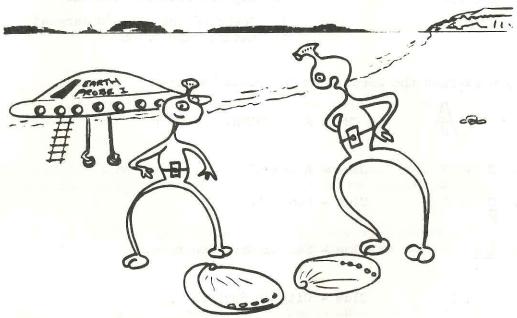
More significant however was the legal conflict between Mullard Radio Valve Company against the Philoo Company claiming damages for their well known Pentode valve. The case lasted for eight days during which time the legal profession appeared to become exceedingly conversant with secondary emission, suppressor grids, grid potentials and other technical terms to get to grips with the situation, which finally ended with judgement being given in favour of the Philoo Company. The development of radio techniques and radiograms brought much enthusiasm for the steam radio into the home, but also brought some frustrations. For example, a musical critic who having invested in a radiogram and thus started a collection of records and finding that a ten inch record plays for three and a half minutes and a twelve inch record for four and a half minutes (78 r.p.m. of course) and consequently utterly frustrated to find that certain passages of his beloved Eroica have been omitted, or the whole work played to the clock to get all of one movement on one side.

The advent of the super heterodyne receiver was I suspect largely responsible for the death of the D.I.Y. wireless, due largely to its complexity and the inability to align the beast when completed. The end of an era of moving iron speakers, four gang .0005 micro fd tuning condensers, so often with hard to find short circuited vanes, head phones with exposed terminals that became very effective when connected to the plate (anode) circuit

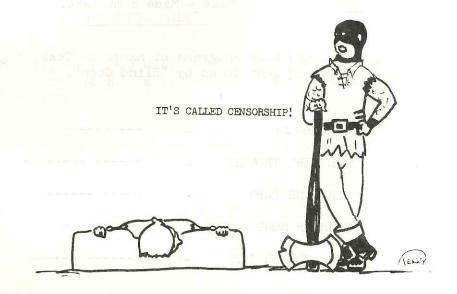


of the output bottle (valve). The end of evenings of drilling and filing ebonite panels on the kitchen table with bits of black swarf landing in tomorrows rice pudding. The end of, "Just popping down to Alf's place, won't be long", to see if he will swop an HF choke for your one too many four pin valve holder, only to come back home at 2 a.m. after listening enviably to his shortwave four. The end of hours of chatting up the people over the road to get permission to attach the far end of your aerial to their chimney and finally with permission granted, breaking slates and knocking over the chimney pot.

All this was great fun and it contributed a great deal to the closeness of the community. However, I suppose it is a good thing that we can now go home and just push a button to bring roaring into action our 30 watts per channel sterio radios with VHF frequency modulation fully transistorised, highly sensitive and with signal-to-noise ratios of several hundreds of thousands of db's.



PERSONALLY I DON'T KNOW WHAT ALL THE FUSS WAS ABOUT THEY MADE LOUSY ASHTRAYS ANYWAY!!



		PUZ	ZLE PAGE	
1. Match	the places	with the d		ons:-
1.	Surtsee		a.	Home of the Canaries
2.	Belize		b.	George Cross Island
3.	Krakatoa		c.	Steel industry centre
4.	Quito		d.	1968 Olympic city
m. G 1454 5.	Norwich		е.	World diamond centre
6.	Munich		f.	The world's newest island
7.	Amsterdam		g.	'B's smaller brother
8.	Gozo		h.	Chewing gum capital
9.	Sheffield		i.	Highest altitude capital
10.	Malta		j.	Scene of the world's largest natural explosion
2. Can y	70u extract t	he words f	from the	clues below:-
e.g.	H	is CH i	in A = C	HINA.
1.	S + Y	Clue	- A Beac	h?
2.	$\frac{G}{N}$ Clue - Control.			
3.	$\frac{L+}{S}$	Clue	- Second	division team.
4.	BR : L	Clue - City or Rovers.		
5.	SL + ER	Clue	- Verbal	lies? Names Section 1984 Line 1985
6.	ED Clue - Made a mistake.			
		some anagra sent to us		ames of Teks to get you and Coon".
LORD BRINE				
	HAD GIRL TROUBLE			
	SIR RONS	BABY	10000	20 CO
	FOUR OR N	ONE		
BURY CLEVER TEK				

HOUSEHOLD HINTS

To save time looking through your workbox for old buttons, tack them all onto a piece of cloth, they can all be seen at a glance, after which the cloth can be rolled up and stored.

When turning up the hem of a dress, use short lengths of thread, then if it gets caught when wearing, only a small amount will come undone.

Attach a small metal ring to zips of childrens coats and boots to make it easy for small fingers to manage.

When sewing the hem of delicate material, hold it in place by using paper clips instead of pins, these won't leave any marks.

HOUSEHOLD HINTS

A burnt sauce-pan will come up bright and clean if it is filled with cold water and soda, left for about an hour, then heated slowly and left to simmer for a few minutes.

Polish that has gone hard in the tin can be softened by the addition of a few drops of olive oil, left for a few minutes and then stirred.

If your curtains get in the way when cleaning windows and paintwork, slip them into a wire coat hanger and then hook the hanger over the curtain rail.

Foam rubber stuck to the back of the headboard will stop beds from damaging the paintwork or wallpaper.

HOUSEHOLD HINTS

Plastic foam sheeting on a tray will stop the plates etc., from slipping about when serving someone who is ill and anything spilt is easily rinsed out of the foam.

A tablespoon of marmalade added to the ingredients will keep a cake moist.

Flies can be kept away from the food cupboard by placing a small dish with pepper in it.

21st BIRTHDAY

- 12.1.76 Carol Luce (Prod Supp)
- 30.1.76 Donna Brown (Tek Ltd)
- 3.3.76 Jeanine Ferbrache (Caps)

ENGAGEMENTS

- 15.12.75 Keith Pengelley (5000 Series) to Karen Perriam
- 17.12.75 Mandy Le Prevost (7000 Series) to Charlie Worthington
- 24.12.75 Susan Baudains (T.Q. V.A.) to William Belban (T.Q. V.A.)
 - 1. 1.76 Mary Gill (Canteen V.A.) to Paul Gannon

MARRIAGES

15. 1.76 - Jane Crocker (400 Series) to Patrick Robert

BIRTHS ABJUACT WELL TOTAL MOUT A

- 21.11.75 Val and Peter Guilbert (Comp. Eval) a daughter,
 Lucie
- 29.11.75 Beryl and Doug Eley (Prod Supp), a son, Johnathan
- 11.12.75 Heather (Probes) and Malcolm Sarahs, a daughter, Emma Jayne
- 12. 2.76 Sandra (T.Q. V.A.) and Doug McClean, a daughter, Tammy
- 27. 3.76 Joan and Roger Gill (T.Q. V.A.) a son, Simon Roger.

ANSWERS TO PUZZLE PAGE

- 1. l = f. 2 = h. 3 = j. 4 = i. 5 = a. 6 = d. 7 = e. 8 = g. 9 = c. 10 = b.
- S and Y = Sandy.
 G over N = Govern.
 S under L and = Sunderland.
 BR isto L = Bristol.
 SL and ER = Slander.
 BL under ED = Blundered.