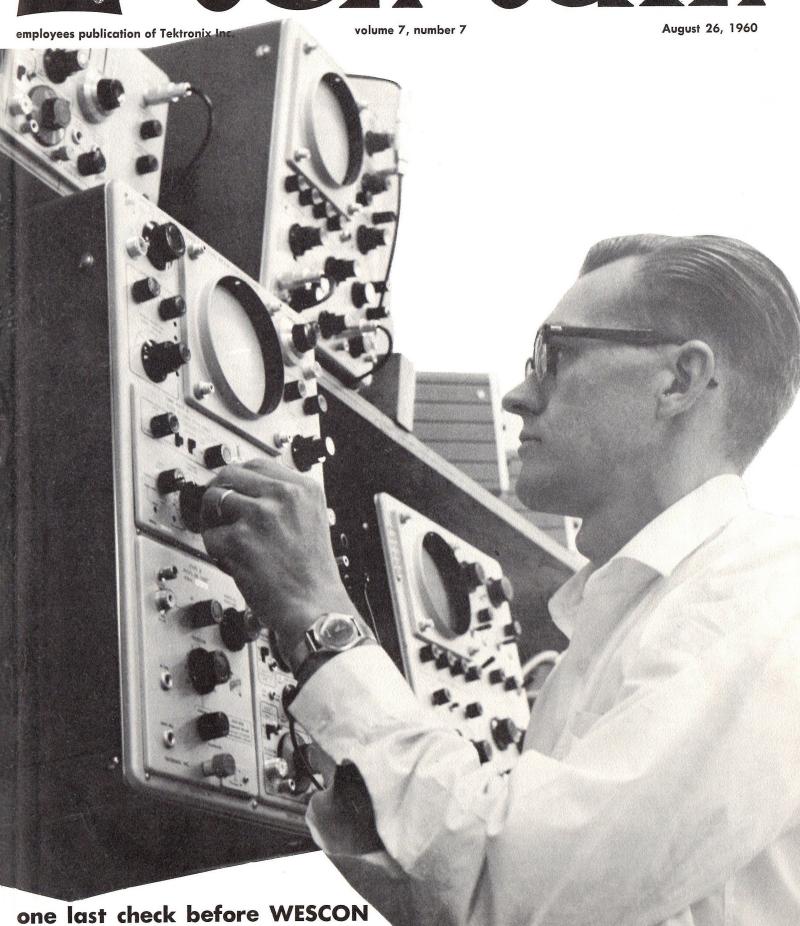


tek talk



tek talk introducing....

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COMMUNICATIONS STAFF

Dale Torbert secretary, departmental news
Tom Williams supervisor, Coffee Break column Ken Ireland graphic designer Don Holeman procedural writer

> **EDITOR** Joe Floren



Adding new depth to the Communica tion department's Publications group is Don S. Holeman, 42. He comes to us from ESCO Corporation, where he worked for nearly five years, two of them in charge of the Spuncast department.

Don will specialize in procedural writing, and is now involved in a manual of policy and procedures for Purchasing.

He is married and has two children, a son Dennis, 14, and a daughter Linda, 8.

Don's experience also includes a partnership in a home building firm, and work as office engineer at Willamette Iron & Steel company.

He also has considerable experience in architectural and mechanical drafting.



stock sale was by Howard Vollum and Jack Murdock-not by some blind collective entity called Tektronix (name withheld on request)

Praise a Common Thing To the editor,

Lon Cooper and his personnel of Cooper Radio are always interested in seeing Tektronix Equipment, so I dropped in to show the 321. I only wish our assembly people could hear the continuous stream of fine comments that we get on the excellent quality of Tektronix workmanship.

Everyone-technicians, engineers, purchasing agents, scientists-has the same high praise for our work. In fact, praise is such a common thing to us field engineers that we seldom comment on it in our call reports.

Just this once, though, I thought it would be nice to pass it on...

> Jerry Kraxberger, St. Petersburg

Picnic Help Appreciated

To the editor,

The Tektronix recreation committee wishes to express its appreciation for the manner in which this year's picnic was supported by volunteers working on the various picnic projects. The success of the picinc is dependent entirely upon the efforts of these employees willing to serve their fellow employees. The very manner in which these employees conductd themselves in these job capacities contributed immeasurably to the success of the picnic, for the cheerful, congenial and friendly attitude of these volunteers is of the essence for the happy atmosphere of a good picinc.

Again the recreation committee wishes to express its thanks for the manner in which Tektronix employees voluntarily contributed their time and efforts that other Teks might enjoy themselves at the

Tektronix Recreation Committee

About Nepotism . . . To the editor:

To the person who expressed his concern in this column last issue over the complications of relationships among Tek employees, I'd like to say thanks for (1) letting us know of your feelings, and (2) utilizing this medium of communication to get the attention of other people who are interested in the subject.

As I see it, "Pro and Con" can help to identify conditions that bother people, but action can result only from translating hypothetical cases into specific facts and observations.

So if the writer will select a person who he feels sure will respect his wish to remain anonymous, and provide specific examples, the chances of improving a situation are greatly increased. If this has to be someone outside the same division, try Communications, Human Relations or Personnel.

> Irv Smith, Employment

Thanks For Blood

To the editor,

I want to thank all the Tek family for donating blood for my husband during his recent surgery and recovery period. I don't know what we would have done without it.

The surgeon says he is very fortunate to be alive. He is able to work half days now and is getting stronger each week.

There just aren't words enough to express our gratitude to each and every one, but God bless them all.

> Thanks again, Mrs. Carl A. Anderson

On the Stock Issue

To the editor,

It is a wonderful thing that the two men who own Tektronix have decided to distribute ownership by means of stock (voting) to a number of people within the company.

But there are two sides to every picture, and I believe that the other side is worth looking at. There are some dan-

gers in this type of program. If they

have been considered, then I cannot understand why there has been no effort made to eliminate these dangers.

In the past there has been an invisible pattern of organization with this company. Responsibility has been rarely defined, and decisions in many cases were distributed to various committees to the point where responsibility disappeared. In our drive to eliminate the time-consuming ritual of formality, we have eliminated much of the identity associated with position.

This last stock award had little apparent pattern or system; in other words, the people selected for this last stock option were so diverse in apparent position or responsibility that the only criterion for selection seemed to be personal friend-

There is one other small danger, and that takes the form of a possible privileged aristocracy within the companya group that will change jobs in the years to come, some going up and some going down. Why can't a suitable reward be created in the form of a salary increase instead of stock distribution?

The stock sale has accomplished two things:

1. It has, by economic bondage, obligated a number of people to employment at Tek for many years. It is a good way of keeping key employees out of other companies.

2. It has provided a convenient substitute for a salary increase for the people in key positions-making personnel procurement from outside sources even more difficult because of the normal reluctance of any supervisor to pay an employee more than his own basic salary.

I would like to know why, in this socalled democratic organization, TEKEM stock carries no voting privilege. Does our management believe the Tek family has no judgement or interest in our overall future security?

In closing, I would like to make clear that the final selection of people for this

Earl Wantland Latest Visitor from Guernsey

Latest in the intermittent parade of Teks from Guernsey who come back to Portland for recalibration is Earl Wantland, production manager there, making his first trip to the US since he left stateside in December 1958 for the channel isle.

He'll head back for Guernsey September 5 after spending the better part of a month familiarizing himself with new instruments and production techniques here. Earl's in charge of all the manufacturing operations on the island.

Rate of growth of the plant there continues to increase, with expansion particularly rapid in the assembly areas. The operation now boasts Kit Prep, Mechanical Assembly, Test, Unit Wiring and Final Assembly departments, and Gordon Sloat of Transformers traveled there this month to help set up a Transformers-Coils department. In charge will be Alan Richmond, who visited Portland in July to learn this phase of manufactur-

There were 81 people in the plant the day Earl left, but that figure is already obsolete, he says. Of these, better than half were involved in manufacturing.

The current Guernsey expansion aims at better supplying our European export market

Started Small in '58

Our Guernsey operation was set up in an unused textile plant in September 1958. The Guernsev Weekly Press in a recent issue, reviewing the growth of the island's newest industry, comments whimsically:

"Tektronix started operations with the smallest possible staff. The American firm employed one." That was Al Hannmann, now the plant manager.

Guernsey offered, and still offers, several advantages. For one, the government allows us to land parts duty-free, since there is absolutely no market for scopes on the island itself. "All the red tape is out," says Earl.

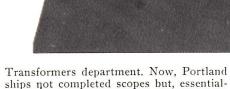
Secondly, having a plant there gives us a chance to establish commonwealth preference. That is, our instruments may be sold in the United Kingdom duty-free if we contribute at Guernsey at least half the manufacturing cost of each instrument

approved.

"However, the big advantage will occur when we get more into mass production, and not immediately," Earl points out. "But we have to get our feet wet first."

Whereas at first Guernsey received all its components (actually completed scopes knocked down) from Portland, now we've set up a rudimentary Component Evaluation group on the island, and have approved some components available in England, including two types of CRT, and some from Germany. In addition, we're setting up our Coils-

ALREADY OBSOLETE is a recent headline in the Guernsey Weekly Press, which reads "Seven-ty Employed by Tektronix." Earl Wantland, our Guernsey production manager who visited Portland this month, reports rapid growth of our operation on the island.



An interesting sidelight on the competitive situation: There are more oscilloscope manufacturers in England than anywhere else in Europe.

ly, parts.

Guernsey now is set to assemble the 535-45, 533-43, 524, 515A and 310A scopes and the B, CA, D, E, G, K, H, and I.

What's the long-range outlook for the island plant? Earl, speaking for the record, smiles cagily:

"I believe Guernsey is as profitable as the rest of our export business."

COVER-Cal Hongel (Engineering) gave one last adjustment to our Type 2 Plug-in unit and 555 scope before the instruments were shipped south to Los Angeles for the annual WESCON trade show August 23-27. For story on the show, see pages 4-5.

Foundation Awards Two Scholarships

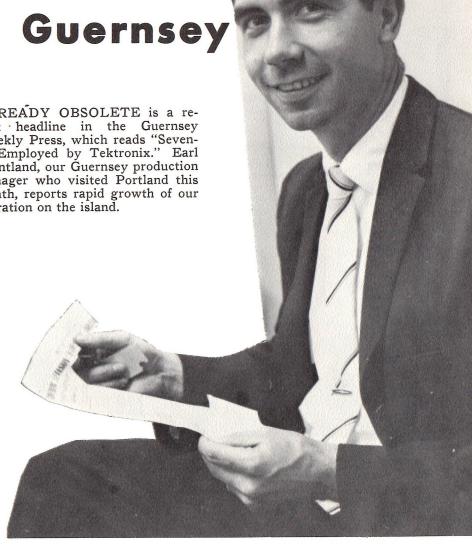
Bill Bush, senior at Beaverton union high school, is a 1960 recipient of a \$500 scholarship from Tektronix Foundation. Bill, son of Mr. and Mrs. William L. Bush, will attend CalTech in the fall.

A similar scholarship from the foundation went to Larry Erickson of Jesuit high school, who will attend Seattle university and major in mathematics.

This was the first year Jesuit participated in the scholarship program. Beaverton high has had five recipients:

Lee Grunden in 1956, John Hutcheon in 1957, Scott Philleo in 1958, Grant Hedges in 1959 and Bill this year. All are currently working at Tek as summer help.

Next year the foundation will expand its program still further and award three scholarships. Tentative plan is for the grants to be given to the top three participants in a competitive examination including candidates from Beaverton, Jesuit and Sunset high schools, according to Bill Webber (Administration), foundation secretary.





EXPERIMENTAL PLASTIC FOAM shipping units for our five-inch cathode-ray tube (right) and our smaller 321 CRT are shown by Steve Vilcko (Plastics Engineering), who's in charge of various projects involving a new material, polyurethane. The plastic may be used for protective packing and for encapsulating several of our Tek-built components.

Thanks to work Plastics Engineering is now doing with a unique new material called polyurethane, Tek cathode-ray tubes soon may travel safely in soft foam beds.

The plastic foam material, mixed cold and allowed to set up in wooden molds, has been formed not only into a shipping unit for CRTs but also into a combination carrying case and shipping box for transformers.

Polyurethane can be made bouncy and soft, as in the CRT package, or rigid, as in the transformer box, points out Steve Vilcko, who's in charge of projects involving that material. The plastic sets up fast. In 30 seconds

polyurethane.

About two dozen packaging units have

gineers tried other materials, ranging

from styrofoam to spun glass to hair

latex, but none protected the tube like

CRTs by military specifications include

dropping a packaged tube six feet onto

cement, after which ordeal it must func-

Jim Peabody (Shipping) recently sent

a CRT in the new unit to Los Angeles

by parcel post and received it back in per-

fect working condition. "I feel sure it

Polyurethane was developed by the

wouldn't have made it in our present

Vibration and shock tests required of

The CRT shipping unit, one of which it's set. In 20 minutes more, under 175 has been designed for the 5-inch tube and degrees Fahrenheit, it's cured. one for the smaller 321 CRT, is a springy rectangular pillow, about as heavy as a been built, of one type or another. Endry sponge. It will fit into a thin cardboard box.

Our present CRT shipping carton is composed of an interior and an interior cardboard box, separated by a folded cardboard "pad." We figure it costs \$1.46 to produce one carton and package one

By contrast, using the proposed polytion properly. Our poly-pack passed with urethane unit, cost of producing and flying colors. packaging would be cut to about \$1.27.

The plastic unit can be re-used indefinitely, what's more.

Production Rapid

To build a unit, polyurethane is mixed as a cold liquid and poured into a wooden cardboard carton," he says. box mold with a simulated CRT in the Germans Developed It

Germans during World War II. They had many uses for it, among them submarine hull construction, to give buoyancy to the craft. Matter of fact, our present nuclear submarines use it, and for the same reason.

You'll also find polyurethane in seat cushions and insulation board. However, Tek's interested in it mainly in the area of protective packaging.

But not exclusively. Plastics engineers also foresee increasing use of the unique material in encapsulating our resistors. capacitors and other homemade compon-

Steve, who transferred to Tektronix in February, has been working with the plastic since its introduction into the US by Lockheed in 1946.

Dutch Engineers Back As Full-Time Tek Employees

Back again at Tektronix-this time for keeps-are two young Dutch engineers who spent four months here in late spring and early summer of 1959.

Bert Ten-Kate, 26, and Bill Velsink, 21, have joined Lang Hedrick's Component Development Engineering group, where they worked last year on turret

The pair successfully completed their final examinations this spring at higher technical school in Enschede. The Nether-

Last year they worked at Tektronix and for a firm in Germany to complete the college's requirements that their junior year be spent in practical engineering ex-



BILL VELSINK (LEFT) AND BERT TEN-KATE

New Products Make Debut At Annual

Tektronix unwrapped three new instruments at Los Angeles's giant Memorial Sports Arena when the annual WES-CON (Western Electronics Show and Convention) began its hectic four-day stay there August 23.

As had been the case at its East Coast counterpart, the March IRE convention in New York, space at WESCON was hard to come by. Hundreds of electronics instrument and component manufacturers managed to stuff their wares into small booths, but luckless others had to twiddle their thumbs and form a waiting list.

Tek had two adjoining 9 x 10-foot booths-only 180 square feet of floor space-in which to demonstrate a total of seven oscilloscopes, two plug-in units and four auxiliary instruments.

New from here at the show were:

The 561 indicator, a basic unit adaptable for a wide variety of special applications. It was shown with the 50-51, 59, 60, 63, 67, 72 and 75 plug-ins, which represent our entire horizontal and vertical deflection system.

The unit, which consists simply of a CRT, power supply and calibrator, will accept all the above plugins.

One specific application, using the 50 and 51 units, will be to check magnetic ink used in new automatic banking sys-

The 516 oscilloscope (a 515A with a dual-trace vertical amplifier system), a low-price, high-performing 15-megacycle

A modified 585, improved so it will trigger on 100 megacycles.

New at WESCON, but previously shown at the spring IRE show in New York, were:

frequency field.

The Z plug-in unit, which extends a scope's vertical accuracy 10 to 10 eral "feel" of the big show; times and has differential amplifier capacity. It may be used as a conven- scopes-not only in our own display but ial comparator amplifier.

The P6016 current probe, which can be used with any oscilloscope.

The Tekamera, our entry in the scope camera market.

The Tektronix pulse sampling system, shown twice before but never as a complete system. It can include a type N sampling plug-in unit; or a type N and a type 111 pretrigger pulse generator, or a Type N, type 110 pulse generator and delay cable.

Shown at WESCON for the second vear were these instruments:

The 519, a distributed-deflection oscilloscope with about 20 times the performance of our 517.

The type S semiconductor diode recovery unit. Designed primarily for testing diodes, this unit also measures resisturing association. tance, capacitance or inductance of circuit components.

Our portable 321, battery operated and transistorized.

By the time our booth and instruments began their journey south August 12. field personnel in the Los Angeles area were deep in their pre-show chores, not the least of which was reserving rooms for Teks from Portland and our field ofices who would attend.

division was brought in for one or two year to year.

The 503-504 oscilloscopes, high-per- days of the show. In addition, several times, for two good reasons:

First, so they could absorb the gen-

Second, so the hundred or so Tek exhibitors-kept in top working condition. issue of Tek Talk.)

Some of these scopes were owned by the firms. Others were loaners Tek supplied just for the show. Each represented an advertisement for Tektronixprovided it performed at its best. So our maintenance men wore eagle eves.

Goal is Showing, Not Selling

The annual show is attended mostly by engineers and technical people, although some buyers always are on hand. trigger takeoff system and a type 113 The purpose of participating is to display new instruments and new uses for Portland area, including textbook selecolder instruments, and not to sell directly. tion, choice of location, scope of material

WESCON is the same kind of show as and selection of an instructor. the giant New York IRE convention, with some of the same firms taking part, vice-president of Portland branch, AES. along with some regional companies from the Los Angeles area. Joint sponsors are IRE and Western Electronics Manufac-

How do we evaluate the show? What good does it do to take part, and how do we know?

"It's actually impossible to evaluate," Marketing head Byron Broms admits. But he points out Tek has no doubt that participating is valuable. We take part for many reasons:

Most important, engineers and buyers at the show look for us to be there.

Second, only by continued participa-Each field engineer from the western tion can we reserve booth space from

Third, trade shows like this one still forming, low-price instruments in the low- maintenance people were on hand at all are the best single way to reach a large audience. Thus they supplement our everwidening, tightly interwoven field engineering program.

(A complete story on WESCON-who went, what happened, how our instrutional, differential or calibrated different- scattered throughout the booths of other ments were received-will be in the next

Everett Cook Has Article Published

Everett Cook (Electrochemicals) is the author of an article in the July issue of Plating magazine, official publication of American Electroplaters' society.

In the article he describes establishment of an electroplating school in the

Everett, a production chemist, is first

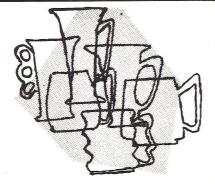


Earth Moving Sign of Summer; Roads, Lots Take Shape



YOU GET A different view of our Metals building, new assembly structures and Ceramics building (hidden by trees at right) from SW Karl Braun drive, Tek's main roadway, which runs from the Hocken street warehouse to the east edge of the new assembly structures on Jenkins road. It will be finished in September, but is already passable in good weather. In the view above, you're looking northwest.

coffee break



... WITH TOM WILLIAMS

Joe Floren's editorial on traffic reached at least one appreciative reader. She was not an employee, nor was her husband—and she lives not on 144th street nor Jenkins road.

Being a neighbor to a Tek, this friendly person talked briefly to me about how mothers along Center street near Beaverdam road feel about our shift-change traffic. The children are constantly warned about automobiles and the normal hazard of not being seen by drivers hurrying home. They know streets are for autos and shouldn't be considered a playground. But please, says our telephoning friend, drive like your own life—or your child's—might depend upon it!

She thanked Joe for his appeal to Teks. Said she knows the greatest percentage of our drivers are watching for small fry down by Beaverdam. Then she said goodbye with her two-year-old squalling in the background underlining her right to speak as a mother on a matter of importance.

Medical Research Foundation's annual report gave considerable space to the recently established primate research center in Washington county.

Quoting from their report, "The Tektronix Foundation of Oregon played an important role in providing the Medical Research Foundation of Oregon with a substantial portion of the funds for the preliminary planning costs resulting in the establishment of this center in Oregon. Their many benefactions to educational and research institutions have been of untold value to the people of Oregon."



Although grants of the Tektronix Foundation come from profits after employees profit share is determined, employees contributing their energies and knowledge to the company's continued success can feel individually proud of this recognition given to Tektronix Foundation.

There's a whole lot of scraping, gouging and moving of the earth going on at our Beaverton property.

Besides the building construction underway—our two new assembly and cafeteria structures on Jenkins road and the large addition to our Hocken street warehouse—heavy equipment has scratched up the ground for parking lots, pipelines, heating tunnels and a substantial addition to Tektronix's road system.

Consulting engineers Huston & Lanc of Cedar Hills are in charge of all site development, according to Facilities Manager Dick Pooley.

Most spectacular change in the scenery is the wide main roadway sweeping northwest in a broad curve from the north end of Hocken street near our warehouse, past SW Knowlton road by the Ceramics building, to the east edge of the Metals building's south parking lot. It's been officially named SW Karl Braun drive, after the Nobel prize-winning German physicist who contributed to the development of the cathode-ray tube in the late 19th century.

The project is scheduled for completion about September 15, together with its westerly extension, which begins at the west edge of the Metals lot and continues on in a gentle curve past our two new Assembly buildings.

Parking Areas Added

A 225-car parking lot west of the Metals building has been completed and is now in use, and two 380-car lots are nearing completion, one to the north of each new assembly building.

A six-foot-wide underground tunnel from our Facilities annex west for 1100 feet has been started. It will carry hot and cold water pipes to heat and aircondition the two new assembly structures.

The three large bald spots south of those buildings, and clearly visible from Millikan way, are future sites for buildings and parking lots. They also provide a convenient place to dump dirt dug up around the assembly buildings.

Power will be fed to the main Beaverton tract from a highline along the Oregon Electric tracks north of the Interim Office building, and will be carried north on a 13.2-kilovolt line to Tek's metal-clad switch gear south of the Facilities building.

General Electric company has begun preparatory work on its 46,000-squarefoot office building on Tek property west of the RT building.

Cables Girl Chosen 'Miss Teenager'

Patrica Higgins (Cables Swing), a summer employee, was recently chosen Miss Teenager of Washington county in a contest sponsored by Hillsboro Moose lodge civic affairs committee.

She was sponsored by Aloha Grange. Patricia, who will begin college in the fall, is a 1960 graduate of Hillsboro

Union high school, where she was an honor student with a 3.27 grade average.

SOME OF our bottle-and-gungals have put together a publication called "CRT Cookbook". It doesn't tell how to cook a CRT, but it does have a lot of keen recipes.

Laura Lusk is chairman of the book, which is a bigger, fatter edition of an earlier volume that an-

swered to the same name.

It has 365 recipes, mostly by CRT and ex-CRT women, and tells you how to whomp up anything from a jiffy hot lunch to foreign desserts you'll mispronounce.

WHAT DOES it tell how to make? Why, for one thing, Chetchouka!

"Gesundheit," you say.

No. Chetchouka is a main dish,

from over Arabia way.

Here's another dandy recipe: Marillenkanoedel, a dessert from Austria. One disadvantage: With such a long name, by the time you ask for a second helping, the marillenkanoedel will be all gone.

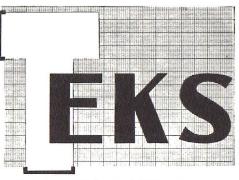
ANOTHER RECIPE IS for Hobo Lunch. This is no relative of that common American restaurant

offering, Bum Food.

Mom's Italian Easter Pie sounds like good eating. So does the Mexican wiggle, which may be (a) Jello; (b) jumping beans or (c) none of these.

THE BOOK has 140 pages and costs \$1 a copy. To get yours call any member of the cookbook committee: Chairman Laura, Elinor Tuttle, Donna Mosier, Verna Harris, Julie Garner, Ann Bloedon, Dorothy Yoss, Shirley Davis and Elaine James.

And here they all are:



SOME OTHER TEK gals, who claim to have been bitten right spang in the Retirement Trust building, have alerted the group representatives to the insect problem. They say they're not sure what sort of bugs are going around, but they're the stinging kind.

One of the varmints has been captured, and in a closeup we see:



Naught but a Tek bug after all. Shucks, everybody's heard of them.

SOME MORE signs seen here and there:

OVER JIM Donoghue's bench in Physics is a recommendation we like:

"If all else fails—follow directions."



THIS WAS ONE of the more cryptic ones:



No water, was what it meant. This posting saved folks time who otherwise would've had to go to all the trouble of turning the handle.

The handy sign was also reversible, and when the water was restored, it could be turned upside down and then read "ON."

OH, TO BE in Guernsey on Boxing day....(from old folk tune we just made up.)

Whatever it means to folks in the US, Boxing Day to a Guernsey Tek is one of his eight yearly holidays.

Sounds at first like a day when you take off work, put on 10-ounce gloves and go several fast rounds with your neighbor. However, Capacitors' Ken Hoggatt, who knows something about England (he speaks the language), says he thinks the name has nothing to do with boxing like hitting each other, but means boxing like in box socials and box lunches.

Earl Wantland, visiting from Guernsey, says this is the way he heered it: Boxing day (the day after Christmas) is the day when boxes of food traditionally have been distributed to the poor.

ANOTHER FEATURE of Guernsey, besides cows and oscilloscopes, is the 28-foot tides that sweep in like stairsteps, one wave on top of another.

You can bet that swimmers pay close attention to tide tables. And the fast 28-foot rise makes it rough on boatsmen out ormering, Earl reports

(USEFUL NOTE: "Ormering" is Guernsey talk and means "gathering ormers.")

Don Ellis Named To Charter Group

Don Ellis, treasurer, has been appointed by Rep. Victor Ativeh of Washington county to serve on a nine-persan charter writing commission for that county.

In accordance with legislation approved by the 1959 state legislature, a county may institute home by first drawing up a charter.

The group will propose a charter and submit it to the county court. A public hearing will be held and after that a vote.

Each member of the court apointed one member of the commission, the court as a whole appointed one, and each of the county's legislators named one. The eight selected will meet and choose the ninth member.

Home rule allows a county to set up any form of governing body it chooses. Otherwise, it is bound by state regulations on county government.

Tektronix, Inc. P. O. Box 831 Portland 7, Oregon



OFF FOR four days in San Francisco August 4-7 were Thanua LaVoie (Unit Wiring) and her husband Laurie. She won a two-day expense-paid trip as grand prize in the Tek picnic IBM drawing. The couple stayed on in the Bay city at their own expense to complete the weekend. Seeing them off at the Beaverton plant were their children: LaRae, 9 (left), Sharon, 11 (back row), Tommy, 4, and Teresa, 8.

Dal, John Kobbe On European Visit

Representing Tektronix at the annual Amsterdam electronics fair, which will be held August 30-September 6, will be John Kobbe (Engineering) and Dal Dallas (Marketing).

They also will attend the Stockholm electronics fair September 10-17 and visit some of our overseas distributors, including C.N. Rood in The Netherlands and Erik Ferner AB in Sweden. The group also planned to stop at our plant in Guernsey.

Mrs. Dallas and Mrs. Kobbe accompany their husbands. The group left from New York August 24 and will return here September 23.

Top Physicist Joins Tek as Consultant

Now working on the staff of Bob Davis as a consultant in the field of solid state research is Dr. Gerald L. Pearson, 50, professor of electrical engineering at Stanford university.

Dr. Pearson, a nationally known physicist, was formerly a department head at Bell Laboratories, Murray Hill, N.J. He holds many basic patents, including some on power and silicon diodes.

He has been with Tektronix since August 1. Although he will be here only a short time during the year, he will be consultant on a year-round basis, even while at Stanford.

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