

TEK TALK

Volume 4 — Number 1

Employees' Publication of Tektronix Inc.

January 10, 1956

TEKTRONIX CELEBRATES 10TH ANNIVERSARY



Howard Vollum

Out President And Chief Engineer, Howard Vollum, is a native of Portland and attended St. Stephen's School, University of Portland and Reed College, graduating in physics. An early interest in oscilloscopes was evidenced by Howard when he built his first over twenty years ago. One of the early scopes built in 1934, while Howard was a student at Reed is still being used there.

During the summer of 1937, Howard worked with Dr. O'Day of the Reed Physics Department on the problem of snow static interference in aircraft radio reception. This research was sponsored by United Air Lines. During the course of this work, Howard and Dr. O'Day attended a session of the University of Michigan graduate school on the 'Conduction of Electricity Through Gases'.

When the defense program started in 1939, Howard was chosen to set up the radio project of the National Administration. This program was a combination of theory and practice designed to benefit the young people taking part, as well as provide skilled workers for the expanding defense program. Also in 1939, Howard was a winner in the 'National Lottery' as his number was pulled out of the fish bowl early when Selective Service was started. On March 4, 1940 his military career started at Camp Roberts.

(Continued on page 2.)



Hosts and Hostesses for the Open House on the evening of January 3, for Tek's 10th anniversary celebration were: Jack and his mother Mrs. Mac Murdock, Kit and Howard Vollum. They are pictured above admiring one of the cakes served during the evening to their many guests.

Anniversary Issue to be Done Annually

Each month, one page will be devoted to reminiscences. Old pictures are being collected for future use, as we feel these hold a lot of interest for everyone. At the end of the year, Ken Walling will make up an issue complete with all the pages.

This can only be made possible through the cooperation of all the employees; gathering up photos of real interest, getting them to Norma on time, and helping Ed Egan get them returned to the right people.

Over a thousand friends and relatives of Tektronix personnel attended the Open House held in celebration of Tektronix's Tenth Anniversary. From 6:30 p.m. until nearly 11:00, they viewed the various activities of all departments. Supervisors and personnel stood by to explain the many operations and equipment uses. This was the second Open House, the first was held in November, 1951.

Midway during the tour, the guests were served refreshments. Two enormous decorated cakes were enjoyed with coffee and soda pop. Howard and Jack hosted the party and everyone enjoyed meeting them. Girls from the different departments served.

Everyone enjoyed the visit very much, as was evidenced by the interest shown in each exhibit and the number of questions asked and answered. Admiration for the precision workmanship was expressed often, along the way, and you could not help noting the pride in the Tek people's voices as they explained and pointed out things of interest. The Open House was so well attended, areas became over-crowded. It is hoped everyone will overlook any inconvenience this may have caused. Tektronix, as a whole, would like to thank all those who attended and hopes everyone had a good time.



Jack Murdock

Our Genial General Manager, Jack Murdock, has been interested in business and people for a long time. When he graduated from Franklin high school in 1935, he chose to go into business for himself instead of going to college. The fact that he didn't go to college didn't mean he wasn't continuing his education. Jack always has been a keen student in many fields of endeavor. Always interested in radio and electronics, he is very well informed on these subjects. His greatest field of interest, however, is people, their problems and behavior, both as individuals and in society generally.

Jack's first business venture in 1935 was the radio and electrical appliance business at 67th and Foster Road, under the name of M. J. Murdock Co. His friendly personality and honest business policies made the M. J. Murdock Co. a success from the start. The country was just emerging from the depression so that it took real selling to get people to buy such things as electric water heaters and refrigerators.

Vollum & Murdock

It was at this time Jack needed someone to take care of the radio service department so that he could put full effort on sales. A mutual friend recommended **Howard Vollum** for the job, starting a friendship and business association which eventually was an important factor in starting Tektronix.

(Continued on page 2.)

Tektronix Makes Headlines in Englands Wireless World

Quoted from an Article by A. J. REYNOLDS, British Isles Representative

As most everyone at Tektronix knows, we have a number of distributors in other countries. These firms have been carefully selected for their industry, integrity and, of course, technical capabilities as well as their sales ability. Sometimes it becomes apparent that several additional characteristics, such as humor and writing talent have been obtained at the same time.

As a good case in point, the September, 1955 Wireless World contains an article about Tektronix by Mr. A. J. Reynolds, Sales Director of Livingston Laboratories, our representatives in the British Isles. Wireless World is one of the more highly-thought-of English technical magazines that our library receives.

Mr. Reynolds begins his article by reminding his readers of the practically non-existent instruments industry in pre-war years in England.

What follows is a verbatim transcript of the less technical portion of his article:

Pre-War Views

"Those readers who were in the radio industry in pre-war days will remember the very high regard in which instruments by such American companies as General Radio, Boonton, Ferris and Measurements Corporation were held. In the early and mid 'thirties the British Instrument as we know it today hardly existed. We had, of course, famous companies such as Cambridge, Muirhead, Sullivan and Tinsley, but they were fully occupied making what can be regarded as laboratory standards, bridges of extreme precision, potentiometers and variable air capacitors of exquisite workmanship. Little was then available, British made, for those awkward characters who required to generate few

microvolts at many megacycles or who cherish a notion to measure the Q of the Litz-wound glass-former inductors in their super short-waver.

Scope Beginnings

The founder member of the new brigade of instrument firms was undoubtedly Marconi-Ekco who, in the late 'thirties', began to make American style instruments in this country. Having a relatively clear field they expanded rapidly, but when war broke out most of the serious work in British laboratories was still done with instruments of American manufacture. During the war few American instruments found their way into the country and the small British industry expanded enormously. It had to: in pre-war days the Standard Signal Generator was an object of awe and veneration enshrined amongst the



The above photograph was taken at the International Analog Computation Meeting held recently in Brussels, Belgium. Mr. A. Schoepp, Manager of Regulation-Mesure, our exclusive representative in Belgium, loaned the Type 535 to the Berkely people to assist in the display of their Ease Computer. And, of course, to take advantage of the opportunity to acquaint prospective customers with Tektronix instruments. Congratulations, Mr. Schoepp!

Tek Talk

Published by Tektronix, Inc., 9450 S. W. Barnes Road, Portland 7, Oregon, by and for its employees. Published the 10th day of each month, or nearest working day. Printed by Tektronix Incorporated.

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Resolutions for 1956:

Resolve to Take Time;

TO WORK It is the Price of Success

TO BE FRIENDLY It is the Road to Happiness

TO THINK It is the Source of Power

TO LAUGH It is the Music of the Soul

TO READ It is the Fountain of Wisdom

TO GIVE It is Too Short a Day to be Selfish

TO PLAY It is the Secret of Perpetual Youth

TO LOVE and BE LOVED It is a God-given Privilege

Radio Project (Howard Vollum cont.)

After nine months of Infantry training and repairing the General's radio, he was commissioned in the Signal Corps and assigned to the Electronics Training Group. This was the first direct commission given at Camp Roberts.

Radar Duty

Members of the ETG were sent to England for a period of eight months duty as radar maintenance officers. Instead of radar maintenance, Howard was sent to the English radar laboratory called the Air Defense Research and Development Establishment. There he worked for almost two and a half years as a development engineer on a high resolution radar for aiming the 15 inch Coast Artillery guns at Dover. This radar was easily the most accurate in service at that time, having a range error of three yards at 20,000 yards (about 11½ miles) and azimuth or angular error of 1/20 of a degree. This radar was very effective in aiming guns which sank German ships trying to sneak out of the English Channel at night. For this work Howard was awarded the Legion of Merit Medal.

On his return to the USA just a few days before 'D Day', he was assigned to the Evans Signal Laboratory at Belmar, New Jersey. There he worked on radar detection and location of enemy mortars. This is accomplished by observing the flight of the shells and using this data to compute the location of the mortar. The same radar-computer combination is used for laying our own mortar fire on enemy mortar positions. For this work he was given an Oak Leaf Cluster indicating a second award of the Legion of Merit Medal.

Company's Formation

After the war came Tektronix,

which was officially incorporated January 2, 1946. The first two years were a struggle in designing and building the first models. During this early period in the growth of Tektronix when the 511 was started and established, Howard was the only designer. The effectiveness of the design of the 511 resulted in quick acceptance of the product and started phenomenal growth of an organization due to word of mouth advertising of satisfied customers.

Howard's personal philosophy of company structure is definitely opposed to the highly formalized regimented corporation. He has utmost faith and confidence in each person and feels they should enjoy acceptance of personal responsibility.

Community Activities

In addition to his Tektronix activities, Howard serves as a National Director of the Institute of Radio Engineers; is active in the local IRE section, having been Chairman. He is on the Board of Trustees at Reed College, and Advisor of the University of Portland. He is First Vice President of the Oregon Museum of Science and Industry.

Howard's hobbies have been tennis and photography. More recently, golf, ice skating and playing an electronic organ have been added. His personal characteristics include a keen sense of humor and a natural ability to inquire into the whys and wherefores of fundamentals of any problems. This questioning of fundamental details is interesting as it questions points which others accept as being correct because it has always been done that way before.

In 1950, Howard married Jean "Kit" Kettenbach. Three boys now grace the household. Charlie, age 4; Steve, 2; and Larry, two months.

Wireless World Gives Early History of Company (Cont.)

polished teak and lacquered brass binding-posts of the standard room, one per factory being about the number required. In the Services thousands were necessary, and such old favourites as the Marconi TF144 were bounced across the desert in 15-cwt trucks and dragged across the gooey mud of forward airstrips by sodden 'erks'.

After the war Britain found herself with a new industry--electronic instruments. New names appeared: Advance, Airmec, Cintel, Dawe, Solatron, Wayne Kerr and a whole host of others. The well-publicized dollar shortage precluded the entry of American instruments and as a result the styling, electrical and mechanical design of the products of the two countries have moved steadily apart. A somewhat similar state of affairs exists to that in the motor industries of the two countries.

Tek Enters the Field

Across in the States conditions were very similar to those at home. The war gave the instrument industry a tremendous fillip and while the old-established companies grew enormously, and along lines that could have been fairly easily predicted, a horde of new companies shot up overnight. (Some of them also shot down again pretty quickly.) Amongst these were two destined to become the giants of the industry. They are Hewlett-Packard, born in the garage of one Dave Packard just before the war and now the largest instrument company in the world in terms of turnover, and our heroes on this occasion Tektronix.

Tektronix, Inc., was organized as an Oregon corporation in January 1946, for the purpose of developing and manufacturing cathode-ray oscilloscopes. The owners all had extensive wartime electronic experience in either military or civilian capacities. The president, Howard Vollum, actually worked in this country on radar development during the war. The company and its products form a useful guinea pig for a miniature study of current American thought in light current engineering. It is a successful company; from small beginnings as late as 1946 it now dominates the American wide-band oscilloscope market and is by far the largest producer of these instruments in the world. Before going on to the instruments let us look at a few points concerning the general organization and see how they tie up with your own conception of an American company and normal British practice.

Vollum au fait

First, the president Howard Vollum, is a distinguished engineer completely au fait with the performance of his company's oscilloscopes and the designer of some of them. This is a theme constantly reiterated in the new generation of U.S. instrument companies. Bill Hewlett and Dave Packard designed all of their company's original products. Rarely is the accountant-cum-financier type of director found over there. On enquiry you will be told, 'You can always take an engineer and train him as a business man but rarely does the converse apply.'

Secondly, at Tektronix they are more nearly self-sufficient than any other comparable company in the world. The only bought-out components are those such as valves and resistors. When the commercially available article is not good enough there is no hesitation in setting up a department to improve on current practice. Commercial capacitors could not be bought that were sufficiently good for use in their time bases, so they wind their own to 0.25%. Bought out c.r. tubes were insufficiently linear for the sort of accuracy sought--so they made their own, incidentally solving a major tube manufacturing problem in the process. The new Tektronix tube uses a helical post-deflection accelerator ring that starts at the top of the tube neck and runs helically right up the flare of the screen. This, of course, is an old idea and obviously the right way to make a p.d.a. tube, but up till now no manufacturer has succeeded in holding the resistivity of his material sufficiently constant to achieve a uniform potential gradient down the tube. Hating the conventional tag-strips and group boards, they developed and manufacture their own ceramic group-boards that contribute greatly to the internal appearance of the instruments. This may surprise those who thought, as I tended to, that the American manufacturer produced a set of drawings that were effectively a stock list enumerating the bought-out parts that merely had to be assembled in the parent works. This philosophy, once prevalent, is now regarded with disfavour by the most progressive companies.

One World?

A third feature is the generosity of the electrical performance compared with the specification. Many experienced observers in this country have been forced to apply a 'transatlantic factor' to written specifications emanating from the U.S. A. It has sometimes even appeared that in the Great Democracy the

output watts were larger than ours and input watts smaller. (Something to do with the size of the U.S. gallon no doubt) Here, however, is a conservatism of claim at least equal to the best of the British firms. On the Type 535 oscilloscope, for example, the claimed Y amplifier bandwidth of 10 mc/s measures as 3 db down at 13.5 mc/s.

Profit Share

The last point, which I am sure has a sizable bearing on the company's success, is the method of payment. Every month 22½% of the company profit is divided among the employees in the ratio of their salaries and a further 7½% added to the pension fund. A simple enough payment by results system, but one which ties an individual's earnings to the performance of the company as a whole. Under this system what matters to each employee is that the customer is satisfied. Surely all men should be working to please the customer rather than to put one over on an inspector three benches away!

As examples of the instruments themselves we have space to deal with but two, the fabulous Type 517 and the latest of the line, the Type 535."

517 — A Favorite

He then goes on to describe aspects of the 517. An amusing paragraph at the close of this describes our sweep timing system: 'The time base on it's fastest speed runs at 10 μsec/cm, that is, a complete sweep of 8 cm in 80 μsec. Although their invariable practice, and one well suited to the method of calibration, this style of specifying time base speed strikes me as slightly ludicrous. It is rather like saying 'Poor old Charlie was nicked for failing to exceed 0.033 hours per mile in a built-up area.' Come to think of it, they are in effect quoting the time base slowness rather than the time base speed.

That then is Type 517, a slightly fabulous beast in that few of us could live up to it. Owning a 517 must be rather like owning a 4½ Ferrari or being married to Marilyn Monroe. Let us examine another model, just as outstanding in its own sphere but more applicable to everyday problems, the Type 535."

Mr. Reynolds then describes the Type 535 in highly laudatory terms, and goes into its unique operation, comparing it to radar equipment. He closes with an observation that "oscilloscope design at any rate has been progressing along lines rather different from our own."

Initial Business Venture (Jack Murdock continued)

In 1939 the 67th Avenue location became too small for Jack's operation. As a result he bought a building at 59th and Foster. After remodeling and painting, this became one of the most complete and attractive appliance stores in the city. The main feature was a G. E. model kitchen, complete with everything necessary to cook and serve meals.

Just as things got going in good style World War II broke out. Appliance manufacture stopped and Jack closed up the appliance business to join the Coast Guard. His knowledge of radio was immediately put to use. First assignment was at the Seattle maintenance base. After a year of this duty, Jack came back to Portland, in charge of a group of radio technicians. His last assignment was as radar and racon installation man, operating out of Seattle.

Company Recruiting

This Coast Guard service also proved to be important to the formation of Tektronix. It was there Jack met and became friends with Miles Tippery, Milt Bave, Bob Davis, Ken Walling, Howard Gault, Paul Belles, Sandy Sanford, and Chuck Gasser.

When Tektronix was formed in 1946, the first operation of the new

company was in Jack's building at 59th and Foster. As Tektronix grew in size, Jack's problems as Secretary-Treasurer and General Manager grew even faster, but his ready willingness to examine all sides of problems and make rational rather than emotional decisions is in a large measure responsible for the success Tektronix has achieved.

In line with his interest in both people and business, Jack is a director of the Portland Chamber of Commerce, on the board of the Oregon Mental Health association, and is general chairman of the Northwest Industrial Health Conference in 1956. In 1955, Tektronix through the Foundation, assisted in sponsoring Dr. Harry Levinson of the Menninger Clinic in his industrial health survey of Pacific Coast plants.

Jack lives with his mother and grandmother on 56th Avenue near Hawthorne. During the past few years he has completed very successful redecorating and remodeling projects on the house. One result of these projects is a very attractive mahogany paneled study where he can 'get away from it all' when desired.

In characterizing Jack, we can say he gains the respect and admiration

of all who know him by his quiet, sincere and genuine interest in arriving at the most fair, reasonable and considerate solution to an individual's and to Tektronix's problems.

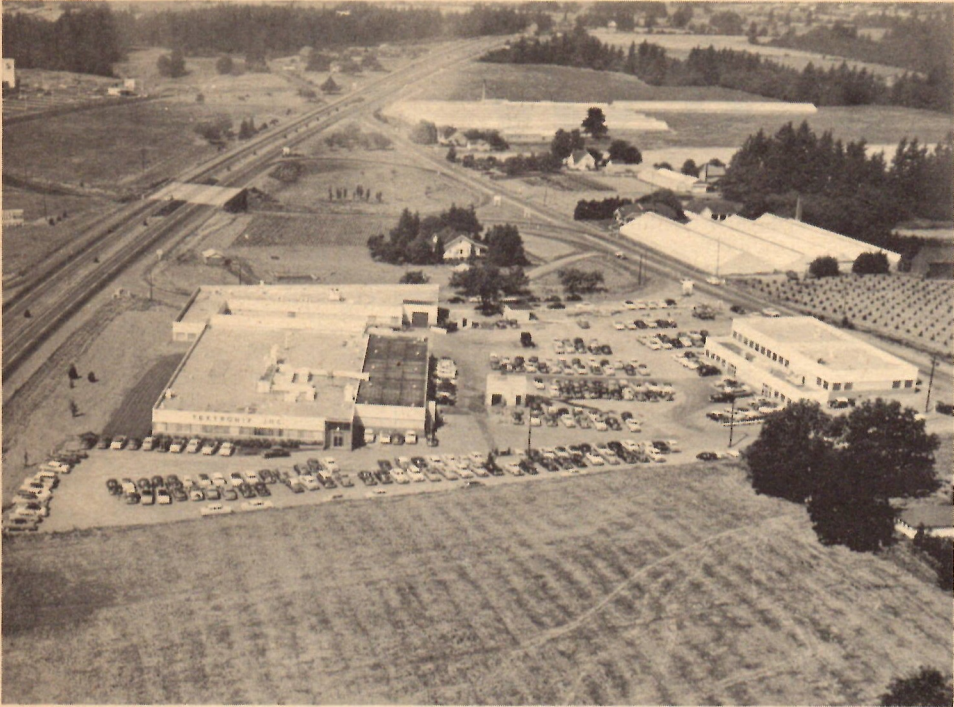
Jack's personal philosophy is of interest to all. He believes that success is available to anyone with ability, initiative, and a willingness to risk personal security. The growth of his own successful appliance business and that of Tektronix is definite proof that Jack 'Practices what he preaches'.

Jack has a variety of hobbies, too. These include photography, hiking, skiing, ice skating (which he enjoys whenever he can be around an ice-rink), and of course, flying. He has a red and silver Beech Bonanza, with cruising speed of 140 mph, and he uses it for as many business trips as he can.

Changing Times —

Jet planes already can travel faster than sound. Pretty soon they'll have one that can travel faster than a rumor.

Any parent can afford to pay the kids a little something to do those household chores. What breaks the budget is those fringe benefits.



This is a panoramic aerial view of Tektronix, Inc., situated in the fertile Tualatin Valley, on the Sunset Highway on the outskirts of Portland, Oregon.



Another view of Tektronix during a spectacular winter scene which is seldom seen in this particular part of Oregon.



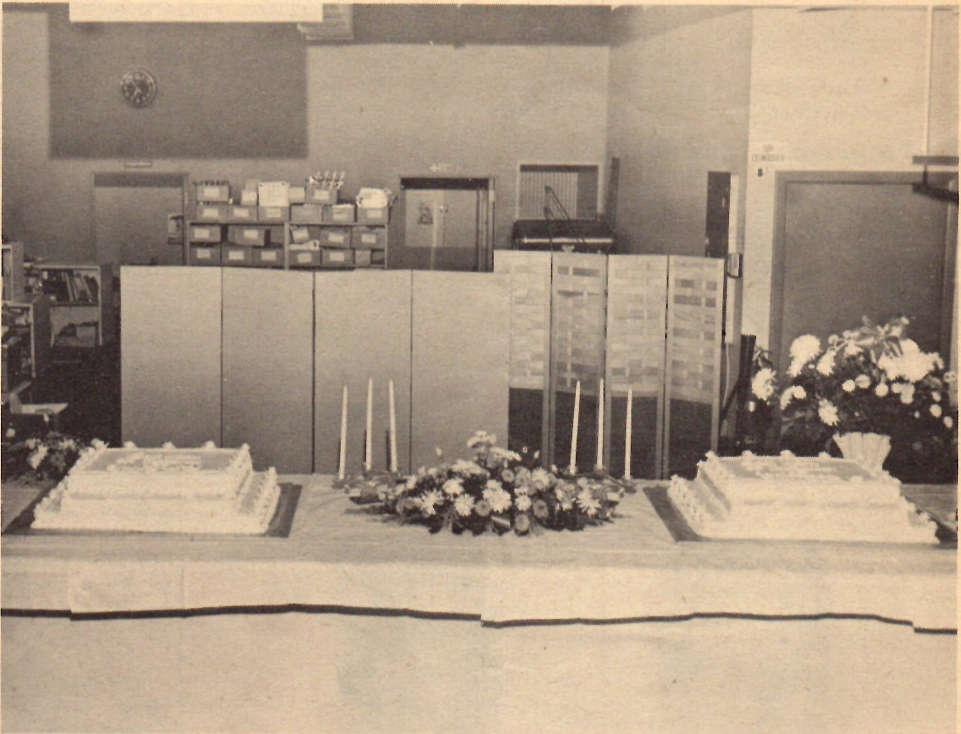
January third was an especially busy day for Howard and Jack. To start with, cards and letters of congratulations came in from Tek personnel and friends. Here Howard is just starting to open them.



Jack and Howard were more than pleased with the 'surprise' shower. Here Jack has taken over the 'second shift' to finish opening the many cards and letters. The cards were prominently displayed in Jack's office so they could be seen by everyone.



Cutting the cake was a tradition fulfilled by Jack on one cake, and Howard on the other. This ritual was accompanied by much wit and gaiety.



This very nice table setting was arranged by Elsie Rohrer for the evening's refreshments of cake, coffee and soft drinks.



This large mosaic was made and is displayed in our own photography department. It is depicting a large proportion of the many manufacturing processes at Tektronix.

United Fund Sponsors Christmas Bureau

'For the fun of any giving, is the pleasure that we're living'

For most people the Christmas season is one of joyous anticipation; but not for mothers and fathers who cannot provide any of the usual trimmings for their wide-eyed youngsters, nor for the lonely old folks desperately trying to get along on meager incomes.

For them Christmas would be a bleak affair were it not for the Volunteers of America, the Salvation Army, Toy and Joy Makers of the Portland Fire Department, the Sunshine Division of the Portland Police Department, and the many other groups and individuals who annually play the part of Santa Claus.

To avoid duplications, and to make sure that all needy families and individuals were remembered, the Community Council, United Fund, again sponsored the Christmas Bureau which acted as a clearing house for all those efforts.

The files of the Christmas Bureau

contained nearly a thousand names of families and individuals this year. Names were sent in from schools, Visiting Nurses, and others who knew the individual circumstances. In addition, churches, clubs, groups of employees, and others registered the names of those they planned to remember.

Many of Tektronix's people extended their Christmas giving a little farther this year thru the Christmas Bureau's program. Seven families of Multnomah and Washington counties were included on the Christmas lists.

Sharing in the excitement and fun of deciding upon appropriate gifts; planning foods; wrapping and tagging gifts, which added the warmth of the personal touch, also added to Tektronix's Christmasy feeling. This undertaking looks like a growing concern, too, with more and more wanting to participate next year. And everyone is welcome!

Credit Union Holds Election Jan. 19

The nominating committee for the Tektronix Federal Credit Union submits the following list of names as candidates for election to the Board of Directors, Credit, and Supervisory Committees for the year

1956. After sincere and earnest consideration of each person's qualifications, these people have been selected:

Credit Committee — Election of 2



Helen Thome CRT
Mary Jane Fanning Unit Wiring
Selma Knutson Unit wiring
Ivan Arnold Shop

Supervisory Committee — Election of 1



Vern Walker Requirements
Joe Dimeo Production Mods
Ed Egan Photography

Board of Directors — Election of 3



Armon McDowell Mech. Eng.
Dick Schmidt Promotion
Les Stevens Accounting



Jack Clark Shop-Tools
Kay Barker Kit Prep

Submitted by the following members of the nominating committee: Slim Sorenson, Jack Clark, Ida May Norby, Ed Egan, Kay Barker, Henry Bahrs, Ray Greco, Ken Jacobson, Chairman

Taking an interest in the election of these candidates as your voice in the operations of the Credit Union, is your guarantee of monetary interest on your savings and proper management of your funds.

Refresher facts: Helen Thome was appointed in August to replace Maryellen Stevens for the rest of the term. MacDowell was appointed to fill in Jane Fitzgerald's vacancy in June, 1955.

Everyone should get acquainted with all these nice people (after all, we may have to ask them for a loan some day, and it's friendlier when you know them.)

THE BIN

Gifts Seen by the roving reporter:

Rose Avery's little Wooden Soldier — nope — not one — Three! One inside the other. My golly, — five!

Clair Kidd's jeep for uranium hunting.

Corry Johnson's rhinestone-studded bottle-opener.

Bev Oathes' mouse-trap paper clip, and Vogue cigarettes complete with holder — and — tinted, yet, to match the new Mercury she and her husband just got.

Bob Carroll's piggy bank, marked to be used — For My Cadillac.

Joe Drapcak's automatic 'egg alarm' — when water boils to proper level it whistles, to tell Joe his egg is done. This modern time!

Ask Irv Sherbeck to see his 'original', hand-made Christmas card.

Ooh! Why does mechanical assembly smell so nice? Christmas perfumes.

Neva Schmid's Holiday favors, made by her for everyone in mech. assy., decorated with Mistletoe and holiday candy and — Chinese Fortune Cookies.

Stan Saety's toy phone for 'short' calls.

Ask Marge Ryan for her mother's home-made peach brandy recipe. A custom on Marge's happily remembered Christmases.

Kathy Hall's cute little 'bloomer' apron made from dishrags, and the cute little note explaining it.

Harold Edmunson's new tie from Gil Schuricht.

The cute little tag on Wendell Ferland's gift tied on along with a piece of — toast?

See the new station-wagon Marshall Jackson got from his crew?

And the clever designs by George Fullmer: decorated mantle, man and lamp-post, that were made from rejects (accessories dept.).

Shipping by candlepower — eight to ten, to be exact — took place on December 22nd, when the electricity was off due to the storms. Fun and good spirits prevailed with everyone going on with their work as usual. Floyd Stewart double-checked every label just to be sure someone didn't get the wrong scope.

Smorgasbord is the only word to describe the quantities and varieties of delectable foods prepared for the Christmas celebration at the plant. The tantalizing aromas, well-stocked cookie boxes, molds and bowls of wonderful salads, hams, rolls, cakes and candies — truly Christmas goodies! Sampling was wonderful, too!

Santa Claus doesn't always wear a white beard. Sometimes he looks like Dal, who has a helper who looks like Bunny Luken. They always step in when needed, as Lee Wagner knows and appreciates so much.

Florence Walker, crt, is staying home now. Vernon is gaining weight, and daughter, Ann is having a wonderful time 'helping' Mommy. Florence left on November 30th. Every one in crt attended a farewell party for her that afternoon, and presented her with a lovely planter she's been wanting. She modeled the turquoise and black 'crazy pants' outfit gifted her by Tektronix people. Looked real cute!

Tek People On The Mend

Egon Ellsner, test, has the affection of all the nurses at Good Samaritan hospital. He was a perfect patient. In fact, they kept an extra eye on him because he was so good. Egon had to lie perfectly still for

days after his eye operation. He didn't fuss and he didn't complain, even tho he was miserable. The nurses can't say enough nice things about him, and how do I know? Doctor Browning told me so. Egon is getting along fine and we'll be glad to see him back again.

Sharon Guthrie called Harold Edmunson up on the Monday after her hasty operation the Thursday before. She informed him she didn't feel quite up to coming to work that day. Really Sharon, I think Harold thought you were serious. But it was awfully nice to see you back the next Monday and looking so well.

Ruth Lukens, capacitors, was missed very much during her sojourn at St. Vincents hospital. Just to show it, the group sent her a lovely poinsetta.

Milo Elkins, stock, slipped on the ice (and believe me, it was hard to tell where the ice started and ended about that time in the morning). He spent several days in St. Vincent's hospital, under observation for his back injuries. Take it easy, Milo! We'll all be glad to see you well too.

Neppie Swanson, night shift, unit wiring, barely started working at Tek again before taking off for the hospital. Neppie was as surprised as we were. She's much better and hoping to be back in the 'swing' of things real soon.

Ruby and Roger Carter were in a car accident Christmas morning on their way to church. Ruby was home over the Holidays recuperating. Glad you're all right, Ruby.

Les Keisling took off for Emanuel hospital in a hurry, too. He got home in time for Christmas, tho. Three or four days in the hospital is plenty for him, and besides they're busy over at crt and he wanted to get back.

Bob Duhrkoop and his Caroleers entertained during the blackout, too. All the familiar songs were sung and those who wanted to joined in. It was very pleasant listening.

Sylvia Bean, secretary for the Tek Credit Union, worked by candlelight, too. She made her entries looking much like Bob Cratchet of the Christmas Carol. Stop being such a 'Scrooge' Dick!

Russell Stover's candy offer was accepted by 64 people at Tektronix. 279 lbs. all together. Distribution of the gayly wrapped boxes and collection of monies in return was Norma's domain. She managed to extract a few choice samples, too, and were they good! We'll have it again next year, we hope. Calories or no! Our large order entitled us to a 5% discount which amounted to \$19.99. This will be turned over to the fund for children's camps.

John West flew home on December 18th for a two-week visit with his parents in Boston. From there he's going to Chicago to be with George Edens, Ken Dellinger, Eve Fitzgerald and Don Clifford, and youngest of the bunch — Ron Goard.

Maxine Bergeron (mech. assy.) is taking a four-month leave of absence starting in December. Husband, Duncan (shop), is expecting to get some pretty fancy cooking from her. Watch that weight, boy!

Elsie Rohrer is still effusing over the wonderful time she had at the different Christmas parties. Everything was arranged to let her be free during the afternoon to visit and share in the festivities.

Capacitor department bedecked with silver foil. Ruth Lukens finally catching the point about the part-

Ship and Share For December

December shipments included only 502 scopes compared to 701 in November. employment climbed from about 640 to 675. Your share of December profits amounted to about 40% of base pay, 10% held for retirement, with half of the remaining 30% advanced to you in your January 5th paycheck, and the other half to be held for you until June.

November shipments were high because most of the instruments that had been finished by assembly and stored in the conference room awaiting test were finished and shipped. In December the conference room filled up again with 530 and 540 series scopes, which we all hope can be cleared out soon.

Orders received exceeded shipments by quite a margin again in December. Only in March, August, and September did we manage to ship more than we received orders for. Altho we have continued to increase our production potential during all the year, we have failed to reduce our back-log of unfilled orders. We are quoting delivery 2½ to 4 months after the order is received on many of our instruments. Even so most customers prefer to wait, altho a little unhappily, for a Tektronix scope than accept a substitute. We'd sure like to reduce his waiting time, and thereby, his annoyance.

ridge and the pear tree. Grace Malone threatening to pick the pear. Dee Tomkin who got a mink coat for Christmas (the girls keep telling her so) except its in storage? And where did you say that Cadillac is, Dee?

Our condolences to Lee Wagner of cable department on the death of her father, Mr. Paul Morronello of New York City.

Our sympathy to Helen Shaver who's father Ruben Johnson, of Hermiston passed away on December 18th.

Maxine Edgerton's house had some special care when it flooded while she was in Corvallis visiting her mother. Neighbor Kal Horine helped divert the water by cleaning out the culvert; Bernice Ireland's husband manned a shovel; Bill McCord's men rallied forces, including a gasoline pump, and dashed to the rescue. Things weren't in nearly so bad shape when she arrived home to find the mess. She could grin a little about it when she thought of all those who had helped — they really did a lot for her morale right then. George Scott and Charles Jay went by after work and helped her get her floor furnace going again. They got awfully muddy in the process but didn't stop until she had heat. Congratulations all of you for that wonderful neighborly spirit.

New Year Resolutions:

From transformer-coil department, Jane Tomkin reports: some members of the transformer department have already given serious thought to new New Year Resolu-

Marjorie Davis resolves to stand on her own two feet; Mary Lazarus resolves, no more drag races on Sunset Highway; Bob Cogan resolves, to keep his bachelor status through the New Year; Chuck Carroll, to give up smoking again this year; Lorena Fox resolves, to bring no more free lunches to her fellow workers; Sid Jones resolves two things: no more baby-sitting during dentist appointments, and no more engaging in arguments with Chick Furchiner, who in turn, resolves to engage no more in arguments with Sid Jones; Burt Avery resolves, to remain impartial when Sid and Chick argue; and Joe Ferris resolves, to go on a diet.