

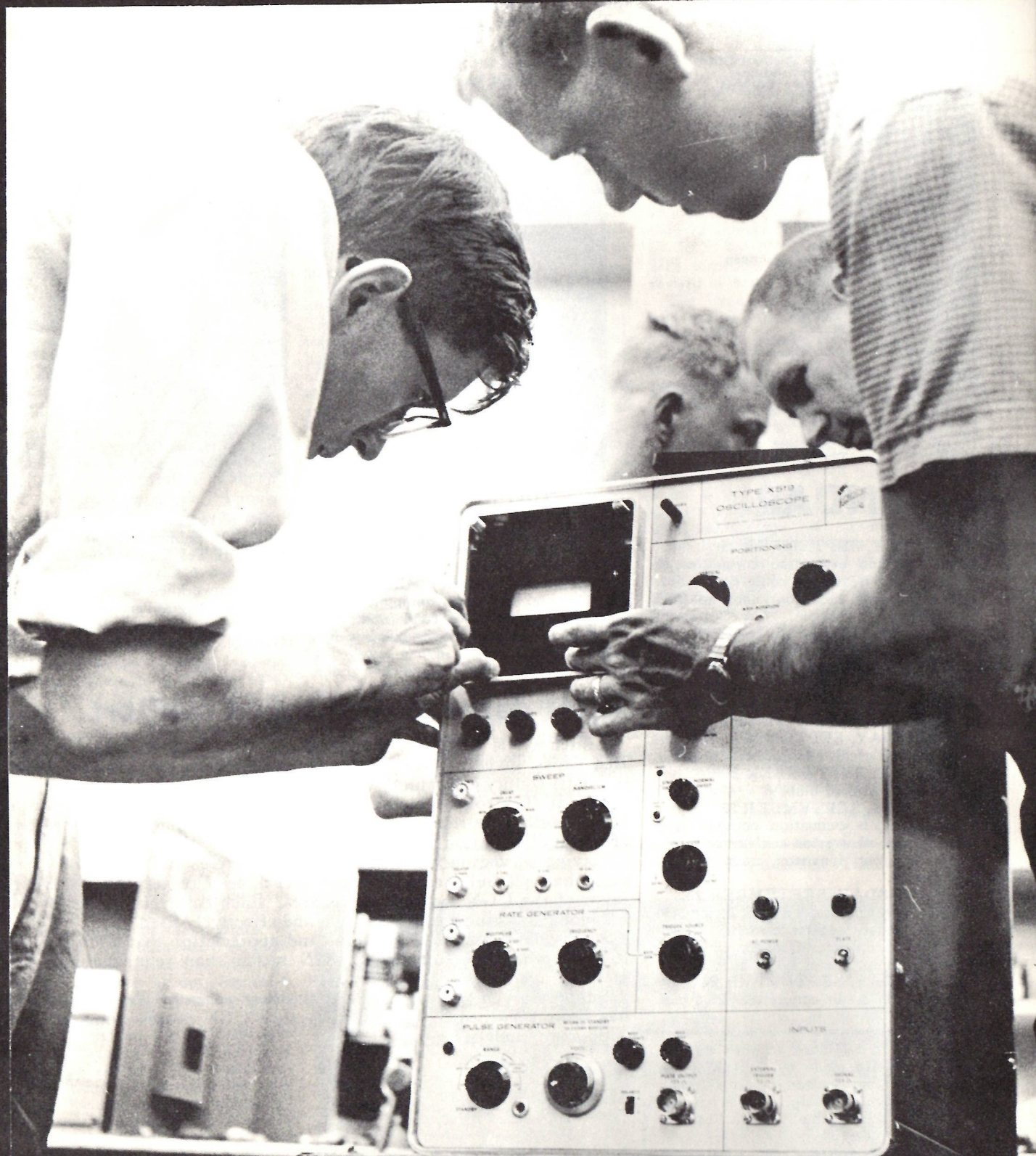


tek talk

employees' publication of Tektronix, Inc.

volume 6, number 9

September 14, 1959



finishing touch on WESCON-bound 519 scope

tek talk

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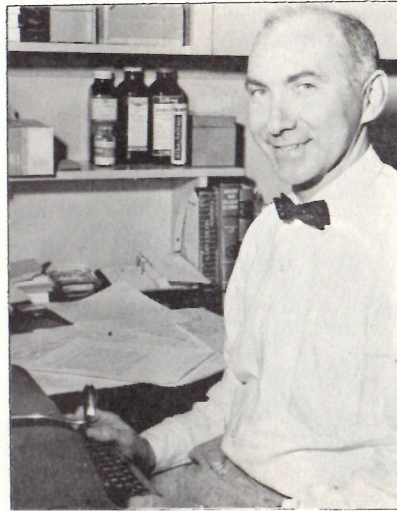
that's why they're here

A communications group is a service group.

In addition to producing regular Tektronix publications, it hopes increasingly to help all departments with problems involving writing, photography or preparation of bulletins, handbooks, news stories, posters or special publications.

To get better acquainted, here's a brief introduction (or re-introduction) of the staff.

Have a communications problem? Stop either of these fellows as they go by—or buzz them at 215. That's why they're here.



TOM WILLIAMS

Your editor for the past two years, still smiling and ears scanning. Looks old, feels young and listens easy. Is available at least eight hours a day (and evenings with permission of wife). Glad to have a stablemate, and now running easier in the backstretch with a second wind.

Communication service is our business, Call Ex. 215



JOE FLOREN

Converted newspaperman, won over to industrial publications at age 30. Has been with Tek Talk for three issues.

Worked 6½ years on Oregon dailies and semiweeklies as reporter-editor-cartoonist-photographer.

Licensed driver. Registered voter. Married. Bats and throws right-handed.

CALENDAR

TUESDAY, SEPTEMBER 15

Production job evaluation committee, 9 to 10:15 a.m. Beaverton conference room. Advisory group luncheon, noon to 2:30 p.m. Berg's.

Group representatives, 2 to 3:30 p.m. Beaverton conference room.

WEDNESDAY, SEPTEMBER 16

Annual TEKEM shareholders meeting, 7:30 p.m. Beaverton union high school cafeteria. Election of 10 directors.

THURSDAY, SEPTEMBER 17

Credit Union credit committee, 2:30 p.m.

MONDAY, SEPTEMBER 21

Fortune Investment club.

TUESDAY, SEPTEMBER 22

Production job evaluation committee, 9 to 10:15 a.m. Beaverton conference room. Advisory group luncheon, noon to 2:30 p.m. Berg's.

WEDNESDAY, SEPTEMBER 23

Group representatives panel, 2 to 3:30 p.m. Beaverton conference room. Tektronix Employees Geology club, 7:30 p.m. Community Church of Cedar Hills.

THURSDAY, SEPTEMBER 24

Credit Union credit committee. 2:30 p.m.

UGN deserves continued support

United Good Neighbor campaign, previously known as United Fund-Red Cross, gives us an opportunity to share our good fortune with those in the tri-county community who are less fortunate.

We at Tektronix always have favored federated fund-raising such as UGN because it represents the most efficient solicitation and the most effective distribution and utilization of funds.

Having served on UGN budgeting committees and community co-ordinating and planning committees, I feel a deep respect and conviction in favor of the UGN method in this area. Each contributor can rest assured his money is being well distributed and effectively used.

I personally feel sincere thanks and appreciation that I am in a position to help others by supporting UGN rather than requiring help from its member agencies.

Support given the campaign in the past years by Tektronix employees has been very heart-warming. I'm sure UGN is deserving of continued support by each of us.

... BILL WEBBER

COVER: Last-Minute touches on the X519 scope are made by Cliff Moulton (left) and Denny Nelson, before shipping the experimental model to the annual WESCON trade show in San Francisco August 18-21.

WESCON:

Tektronix Reveals Array of New Instruments

WESCON, trade show jointly sponsored by the IRE and western electronics manufacturers, was held this year in the Cow Palace at San Francisco August 18-21. The show which draws exhibits from all the major electronics manufacturing and service companies has grown to share equal importance with the IRE show in New York which occurs in March. These two large gatherings have become target dates for the completion of instruments whose development and design have been finalized to the point of being added to the product line of Tektronix.

Engineering people from Portland going to San Francisco for the four day show included Norman Winningstad, Cliff Moulton, John Kobbe, Bill Polits, Cullen MacPherson and Howard Vollum. Earl Scott, Mike Park and Ken Spooner from Production and Byron Broms and Frank Thomas from Marketing added to the technical staff from Tektronix attending the show.

Field Maintenance engineers, Dan Senour and Joe Vistica from Palo Alto spent considerable time checking loaner instruments operating in customer-exhibitor booths to make sure that every Tektronix instrument at the show was in top shape. This makes for good customer relations as well as displaying our own instruments to the best advantage.

Field Men Come

Field engineers from the entire Western Division headed by Ed Bauder were at the show taking their stand to answer literally thousands of questions put to them by the visitors to the booth. The show affords an opportunity to field engineers to make new contacts with potential users and to seek out new applications for instruments.

In from Albuquerque were Lee Cooper and Doug Cure; from Phoenix, Dick Ellstrom; San Diego, Ken Dellinger and Hal Dosch; Palo Alto, Harry Allison, Paul Magnusson and Ed Bauder; West L.A., Gordon Allison, Jim Cook, Dunc Doane, Francis Frost and Harvey Worth. Olie Brynjegard and Warren Dixon from East L.A. completed the roster.

Margaret Johnson, in the tradition of field secretaries, with an assist from Joan Skanderup took the extra load of show-time activity in stride as out-of-towners and last minute arrangements descended on the host-city field office.

Industrial designers Gale Morris and Ken Ireland travelled to WESCON and assisted in the set-up of the booth display which went to the show site via moving van for the first time nearly assembled. Their group is interested in the styling and packaging of instruments and accessories, and along with Bob Foster

from the Mechanical Services group who took time out of his vacation, they toured Hewlett-Packard in addition to making a thorough study of all new styles and trends at the show.

Other Tektronix employees with a high interest in new products and trends in the industry also journeyed to San Francisco to take in the WESCON show. This also gave them an opportunity to renew acquaintances and meet field personnel that they contact sometimes only by mail.

New Products Shown

The Type 176, a high-current power supply, was loaned to Texas Instruments to be used in a demonstration of its 50 ampere transistor. This special auxiliary instrument is used to extend the range of our present Type 575 Transistor Curve Tracer which is limited to observations of transistors operating at 2.4 amps and below. The Type 176 extends the range of the 575 to currents as high as 100 amps at 20 volts and 40 amps at 50 volts. The system makes possible the observation of waveforms which describe the operating characteristics of the transistor. Manufacturers of components and equipment using transistors will use it as a test unit or for development research.

New products going to the show from the engineering department included the sampling system made up of the Type N plug-in, Type 110 pulse and gate generator and the Type 113 delay cable unit. The sampling plug-in can be used with any Tektronix oscilloscopes of the 530, 540 or 550 series. Risetime of a repetitive signal can be measured to approximately 0.6 nanoseconds* by use of the plug-in. Successive samples taken at a slightly later time at each pulse recurrence reconstruct the phase on a relatively long time base. The technique provides displays with apparent sweep times of as little as one nanosecond per centimeter. This is similar to photographing

* nanosecond=10⁻⁹ sec-millimicro sec=
cent=

the motion of a particle passing your line of sight at the tremendous rate of over 6,300 miles per second! The technique depends on the repetition of the occurrence at a rate that can be synchronized with the instrument.

The improved Type 321 transistorized portable oscilloscope with a self contained power supply got its share of the high interest shown at the booth. It is designed to operate from ten high-current size D flashlight cells or rechargeable batteries or more conventional direct current or alternating current sources. It weighs only 12 pounds without batteries, is 8½" by 5¾" by 16" in size and will sell at \$775 according to tentative specifications revised in August.

The Type 519 shown to engineers and scientists for the first time at the WESCON show offers a new standard of clarity in the display of advanced electronic phenomena. Having a bandwidth of greater than 1000 meg. Dependable observations can be made with the new instrument of risetimes in the order of nanoseconds, the lower limit being 0.35 nanosecond. 24,000 volts potential is used to accelerate the electron beam toward a 2 by 6 centimeter viewing area which gives a bright display of excellent definition and picture size. Power supplies, delay line and oscilloscope circuitry are all contained in a compact single unit.

The engineering model of the Type 519 was the culmination of four years development work brought into its final form through the joint efforts of the engineers who fathered the design, mechanical services, component groups, photography, and drafting and panelcraft. These people worked around the clock to insure that the instrument would be ready to show.

The Type X544 using a new rectangular cathode-ray tube provides an illuminated digital readout of vertical-sensitivity

(continued on page 4)

PANORAMA OF Cow Palace area where exhibitors, including Tektronix, showed new instruments and services to thousands of visitors.



TEN TEKEM DIRECTORS TO BE ELECTED SEPTEMBER 16



CANDIDATES FOR TEKEM directorships are (from left) Byron Broms, Dal Dallas, Bob Davis, Don Ellis, Bob Fitzgerald, Derrol Pennington, Dick Rhiger, Dick Ropiequet, Ken Walling, Bill Webber and Jack Henderson. Election will be at the annual shareholders' meeting September 16.

Coffee, Cake Celebration Honors Departing Beaverton Nurse



Coffee and cake was served in mid-August to honor Frances Rowe, Beaverton plant nurse who has left Tektronix to go to Toronto. She's pictured (right) with Lois Addington of Sunset plant.

Frances' replacement is Ina Parker, veteran nurse who last was employed by Multnomah county health department.

Ina, who lives in Cedar Hills, began work September 1.

Ten Tekem directors will be elected at the annual shareholders meeting 7:30 p.m. September 16 in the cafeteria of Beaverton union high school, Second and Erickson.

There are 11 candidates, 10 of them seeking re-election for one-year terms.

Jack Henderson, Instrument Service, has filed among with incumbents Byron Broms, Dal Dallas, Bob Davis, Don Ellis, Bob Fitzgerald, Derrol Pennington, Dick Rhiger, Dick Ropiequet, Ken Walling and Bill Webber.

Each was nominated in accordance with recommendations of the nominating procedures committee, headed by Dick Schmidt.

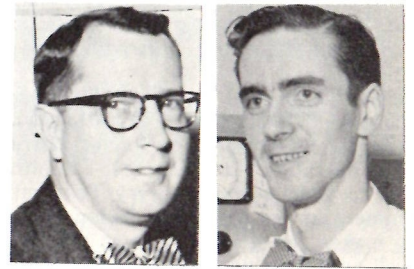
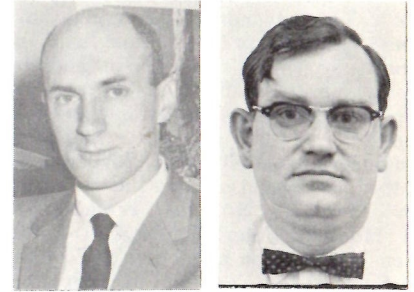
Need Proxy Cards

Shareholders on record as of August 1 are entitled to vote in proportion to their number of shares. Only those persons with proxy cards will be admitted.

All shareholders are urged to attend and vote. Over half the outstanding shares must be represented, either in person or by proxy.

Other current business also will come before the group.

Newly elected board of directors will meet at 3:30 p.m. the next day, after ballots have been counted.



US Chamber Research Chief To Speak at PM Meeting

Dr. Emerson Schmidt, United States Chamber of Commerce economic research director, will discuss political and economic topics at a participative management meeting October 3, tentatively set for 10 a.m.

The session will be open to the full participative management group.

Tektronix Reveals New Instruments at Trade Show... (continued from page 3)

and sweep-time settings positioned within the picture area of existing oscilloscope cameras. This allows settings of sensitivity in volts per centimeter and sweep speed in time per centimeter to become a permanent part of all waveform photographs. It is designed with simplified operation, giving a calibrated readout of sweep time even when magnification is in use. A special series of plug-ins with circuitry to actuate the read-out feature on vertical-sensitivity will also be made available to users of the Type X544.

The Type Q strain gage, Type S diode-test and Type Z differential plug-ins were added to the plug-in display at the WESCON booth and improved probes, the P-1000 and P610, were shown for the first time.

During the week of August 10 to 14, and especially the last two days, Thurs-

day and Friday, our Photography and Printing departments again went all out on "last minute" literature for WESCON. Ordinarily we send one or two new instruments to a show, and information on specifications and price is not usually available until just before show-time, making a crash program necessary on photos, platemaking and printing. This year we sent eight new instruments to WESCON, requiring eight sets of tentative specification sheets and two other sets of printed matter. All of this new literature was printed and shipped out in time for the show, thanks to the cooperation of our engineers and the efforts of the folks in photography and printing.

An engineering prototype of a clip-on current probe was also shown. Until recently current, which is one of the basic

quantities in electronic circuits, has been rather inconvenient to measure. A current meter in some cases could not be used without opening the circuit and then would not usually give information such as a peak value. Special adapters were also necessary to make measurements of current waveforms by use of an oscilloscope. The clip-on current probe can take current reading by merely being clipped around the conductor. Electrically, the probe is a current transformer. When the probe is closed around a conductor through which current is passing, the conductor becomes a single-turn primary for the probe-transformer. The oscilloscope then displays the wave form of the current in the conductor. Problems inherent in the system are in low frequency response and getting high sensitivity to low currents without picking up noise.

Dutch Students Return Home



Bill Velsink (right) and Bert Ten-Kate left Tektronix August 28 after four months' work with our Component Design group. They have returned to the Netherlands to complete their senior year of college and receive degrees in engineering.

Bert and Bill spent a full year of practical work in the engineering field, as required for their degree. Before coming to Tek they were similarly employed in Germany.

Their work here dealt largely with a novel approach to a turret attenuator design.

Before leaving they were given a complete tour of all departments and were guests of honor at an informal cake and coffee gathering.

Tektronix Loans Mike Brand For Annual Fund Campaign

Mike Brand (Administration) is one of 25 business and industry representatives from Portland metropolitan area whose services have been volunteered to help organize and co-ordinate this year's United Good Neighbor (Formerly United Fund) drive in this area.

The group, which underwent intensive training the first week of September, will serve full-time for 11 weeks. Mike's section will include the names of forty-some industries, each employing over 50 persons. He will help organize those businesses' UGN campaigns.

Experience Valuable

"Mike Brand has been loaned by Tektronix because we feel he can contribute effective effort and will gain from the experience," explained Bill Webber.

The UGN campaign is a method devised by contributors in the business community to support social welfare and health agencies.

Organized and manned by volunteers from all sectors of community life, its open-door policy makes it available to all private agencies offering such services.



MIKE BRAND

Plant Committee Discusses Publication of Safety Scoop

Possibility of publishing a Safety Scoop to increase employee safety-consciousness will be discussed at September 14 meeting of Beaverton plant's safety committee, to be held in room B, plant cafeteria.

Also up for discussion will be a suggestion to post speed limits around the plant.

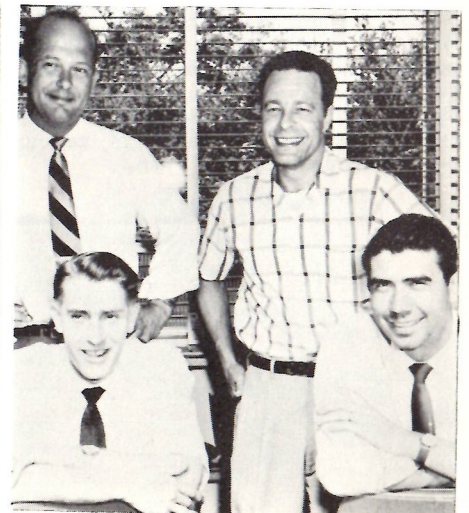
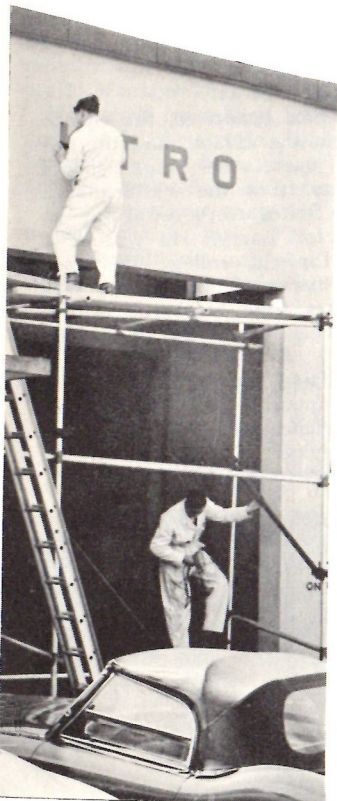
Plant Visited by Representative Of Netherlands Distributor

Visiting Tektronix August 17 on his way to WESCON was G. "Bob" Van Binnendijk. He's with C. N. Rood, N.V., our distributor in The Hague, Netherlands.

Bob is an accomplished ham operator (PA4GVB). During the serious floods of 1952, he operated one of the few existing communications links with the outside world from his ham station.

GOINGS-ON IN GUERNSEY....

UP GOES THE Tektronix sign at our plant on the Island of Guernsey (left). Below, the crew surveys an incoming shipment. At right are "the four horsemen of Cow island," (clockwise from top left): Al Hannmann, Dave Spinks, Earl Wantland and Don Alvey.



On All Sides: Signs of Growth

Ceramics Structure Rising on Schedule; More Groups Move into Trust Building

Almost any way you looked this week, you saw signs of Tektronix expanding.

East of the Beaverton plant, walls have been poured for the new Ceramics building.

Four production groups are in full swing in the Retirement Trust building, and Customer Service will move in next week end.

Work on the Boiler House addition, which will quarter Militarized Products, is going on as scheduled, with completion set for sometime in November.

Next in line will be an assembly building, followed by an office building on Tektronix' 250-acre Beaverton tract.

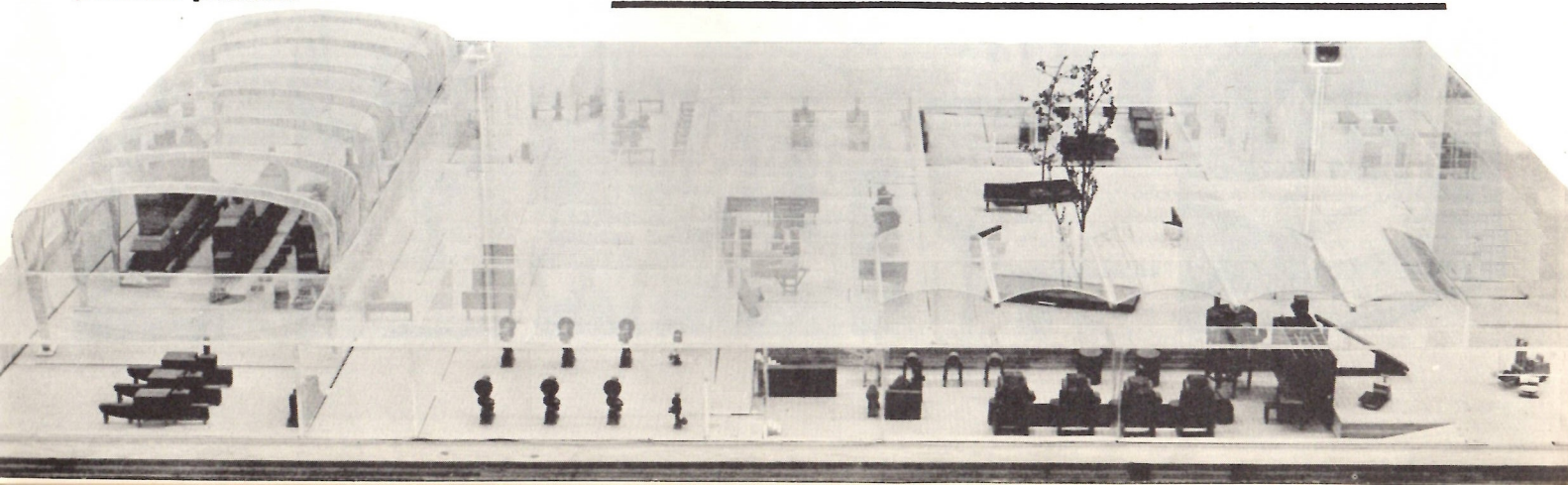
"Out of the Ground"

Getting the Ceramics structure "up out of the ground" before fall rains occur—the one most important single step—is now assured, reports Facilities Manager Dick Pooley.

Unless the steel strike hampers progress, the building will be completed by March 1, with most of February devoted to cleanup and painting.



WORKMEN ON THE new Ceramics building, which is rising east of the Beaverton plant, prepare (above) for pouring the walls, which job has since been completed. Below is a plastic scale model of the building, designed with an eye to eventual automation of various production processes.



Start of the Tektronix road system, integrated into the company's overall property development program, will be a roadway south from Jenkins Road east of the Ceramics building, providing access to the parking lot. This road construction will be started probably by October 1.

Remodeling at a Minimum

Interior remodeling at the leased Retirement Trust building has been very slight, involving mostly partitions.

Now in and operating are these production groups: Transformers, Coils, Plastics and Scopemobiles.

Marketing's Customer Service group will move in beginning September 19, completing the building's occupancy.

Two-Level Building

Boiler House addition, located west of the present Facilities building, will give Militarized Products a 60 x 120-foot, two-level structure.

Upper level (3600 square feet) will be for Engineering and Development, with some production areas, and the lower level will house environmental testing laboratories.

Footings and walls have been completed, as well as a tunnel to contain



cooling and heating pipes to serve future Tektronix property development.

Tek's Larry Lockwood Participates In Annual WESCON Electronics Show

Larry Lockwood, 1959 graduate of McMinnville High, developed the sponsored entry of the IRE Portland section in the WESCON exhibits. Larry's jewel was his highly sensitive, 10 centimeter wavelength, parametric amplifier.

The trip to WESCON actually began with Larry's entry in the science fair held at McMinnville High. Awards won there and in the county and regional fairs that followed brought Larry's work to the attention of Cliff Moulton acting as judge for the local IRE section at the state fair in Corvallis. Cliff helped select Larry's entry on the basis of its being of highest interest to people in the

electronics field.

The trip to San Francisco, the chance to participate in the exhibit, and the opportunity to meet other high school science students from the western area of the United States were rewarding as an experience for Larry. He will be a freshman at Linfield college this fall, majoring in Physics. This summer was spent as a part time employee in the engineering department, working with Cliff Moulton.

The science fairs, sponsored jointly by schools and supporters of the Oregon Museum of Science and Industry each year gain in activity.

Credit Union Card Return Lagging

Only about 10 percent of the insurance beneficiary cards mailed to Tektronix Federal Credit Union members six months ago have been returned, according to Manager Dick Manning.

He urged members to complete and mail back the cards, which designate beneficiaries for both group life insurance and loan protection insurance amounts.

"It's important that the cards be returned," Dick said. "It will simplify disbursement of insurance money and might prevent it going to the wrong person."

Flying Club Members Go to WESCON by Air

Four members of Tektronix Flying Club flew to the WESCON trade show in San Francisco August 18-21.

Cliff Moulton, piloting the club's Tri-Pacer, had his wife Marilee and field engineer Francis Frost as passengers.

Riding with John Kobbe in his Cessna 170 were his wife Jenni and Oz and Sammi Svehaug.

Two pilots rented planes:

Bill Polits flew a Cessna 172. Passengers were Norm and Delores Winningstad.

Roger Haight, in a rented Mooney, was accompanied by Ken Spooner and Mike Park.

RETIREMENT TRUST building, being leased by Tektronix, will be full up this week end as Customer Services moves in, joining Transformers, Coils, Plastics and Scopemobiles. Below, Plastics workers chow down while interior remodeling goes on.





GIVING THEIR all for Warehouse State college are volleyballers (from left) Harry Kemper, Larry Whitmore, Merlin Miller, Don Place, Bob Messner, Dick Machlan, John Fontana and Helmuth Kalmann. Bad weather doesn't stop them. They go inside the warehouse, find an empty aisle and set up their net.

CERAMICS

Janet Hoodenpyl and Janet Ruhlin played in the state softball tournament in Medford August 13-16. Forest Grove, their team, defeated Klamath Falls 5-1, Medford 6-1, and Eugene 1-0 before losing twice to Salem, 2-0 and 1-0.

Janet Hoodenpyl was named all-star third baseman. Also on the all-star team were Forest Grove's pitcher and left fielder.

PEGGY JONES' GROUP

Canned goods shower was given for Doreen Schwab, who became the bride of Kenneth Rautio. She will teach math at Sunset High School.

Marge Davis, who worked with us last summer and then went to Oregon College of Education, is back. She will return to school after her wedding in September.

Helen Ross is also back. She wears a guard on her finger.

Our department is excited about the progress being made toward the new Ceramics building. Those of us who drive past the airport watch with interest.

LYLE CURTIS' GROUP

Darryl Fowler, who's worked in Ceramics for over a year, will enter Portland State college this fall. He will be on the football team, so we'll keep an eye on the games this year.

PINKY FOWLER'S GROUP

Our new strip glazing machine is now being used for production. It sprays glaze on the ceramic strips.

Tooling department is now automating Ceramics. The glaze machine is one of several new machines planned.

To help maintain and build these machines we have four new men Wayne Rust, Jim Calendar, Les Wold and Arnold Brokaw.

DICK MILLINGTON'S GROUP

Jeffrey Edward Olson, a new grandson, joined six granddaughters in Helen Stowe's family group recently.

Mr. and Mrs. Leon Schurr of Ft. Collins, Colo. are visiting Gladys Snell. Mr. Schurr is her brother.

Anyone going on a camping or hunting trip should contact Rosa Alton for a list of do's and don'ts.

FINAL DAZE

Rhoda Chalupa's grandchildren, Karen, 2, and Pamela, 3, took top honors at the Tek family picnic's record hop.

Lloyd Bennett transferred to Instrument Service.

BOB RASMUSSEN'S GROUP

Cathy Bryan vacationing at Yellowstone and Las Vegas just missed the earthquakes at Yellowstone.

Connie Harding moved into her newly purchased house but is not completely settled.

We had a farewell cake for Elaine Walker who is leaving us for the day shift.

New girls to our group: Adell Webb, Janice Thompson, Mildred Bomhoff, Betty Duffield, Strissla Hall and Millie Moreland. Cathy Brown is back from Al Hayes' day crew.

Another "smorg"—this one for an early farewell to our summer help—thanks for a job well done, boys—and to send Norm Dyer off for his post-grad course in Tennessee.

CRT

The new automatic rodder rods all four rods at once, speeding up production, and is much more accurate.

The new machine will keep three people busy rodding at an average of 40-50 guns per person.

Eventually this type machine will be used for all the guns.

John Liedke's group welcomes Shirley Krosmeier, John Lucas, Arlene Rusetter, Lillian Meyer (Transfer from Ceramics) and Dick Trythall (transfer from Finals.)

Small parts department has two young summer students to be proud of:

Joann Walch, working days and attending night school classes at Portland State, went to high school at Rhododendron and two years at Whittier college. She plans to attend University of Oregon Medical School, school of nursing, in the fall.

Lee Peterson attended Whitman college, where he majored in chemistry. He plans to go to graduate school. His main interests are bowling, skiing and tennis.

Betty Sites is back at work. Nola Bartell of the press room and her husband Glen had their car window broken at Yellowstone park by a bear whose picture they were trying to take.

A mother bear and two cubs came near the car. Glen got out to take its picture and Nola fed them cantaloupe through a partly open window.

The bear shook the car and shattered the glass, and the Bartells took to the road.

Cy Littlefield took a trip to Kansas via the Rocky Mountains in his new Renault Dauphine, traveling 4200 miles at a cost of \$42 for gas and oil.

Paul Zerginyi cut his foot badly with a power mower.

CRT girls spent an evening at Virginia Olson's home swimming and ended the day with a lunch by a warm fire.

Margaret Berndt left for Honolulu September 13 for two weeks vacation.

New in Small Parts is Neva Edwards, transfer from Mechanical Assembly. Her husband is stationed at Portland air base. They have one child.

Elinor Danielson lives in Oswego. Her husband is a salesman. They have three girls and a boy. Elinor worked at Iron Fireman spot welding, testing and relay assembling.

Charlotte Howell transferred from Screen Preparation. Her husband, who farms near Banks, is a member of Washington County Sheriff's Posse. Her hobbies are riding, hunting, swimming and dancing. She has a son and a daughter, both married.

Margaret Coles lives in Portland. She worked for White Stag six and one half years. She has two children, a boy and girl.

Clyde Adams and his group are sorry to lose two summer workers, Lee Peterson and Melody Erickett, both of whom will return to school.

PRODUCTION TOOLING

Nonus (Tommy) Tucker has left to join Vern Hansen's group and be in closer contact with CRT. Tommy has been making dies for CRT and transporting them back and forth.

Armon (Mac) McDowell was the last in our group to shave off his whiskers. We have to get used to each other all over again.

We compliment the picnic planning committee for a job well done.

KNOW STOCK

A heart-warming housewarming was held August 22 at Beaverton for Andy Harding and Connie. Everyone from the warehouse was there, with spouses.

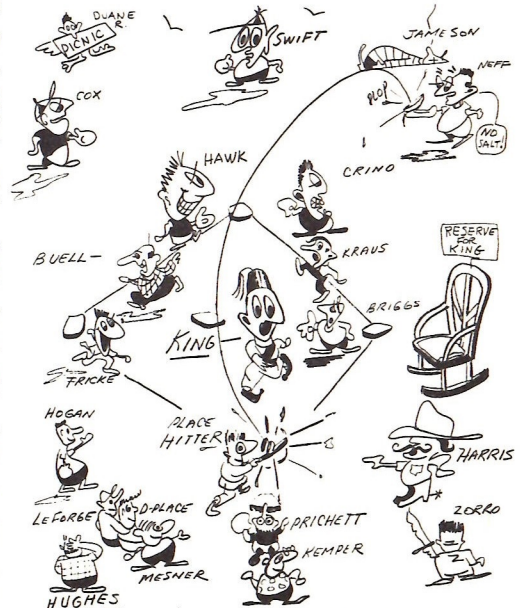
Andy gave his version of "Piccolo Pete." They received a portable barbecue set and foldup aluminum table with chairs.

Here's another fish story: A young lady at the warehouse went bass fishing with her boy friend. They caught nothing, but he said they're going to keep going out every night until they catch a bass. Our young lass informed us, "I'm not sure I want to fish all the time!"

The warehouse crew received a dirty T-shirt and an amusing note from the Sunset stock group. This "shirt off my back" left Warehouse at a loss. Our only suggestion is, next time use Hide soap. Hide helps make dirty T-shirts dirtier and dull T-shirts duller.

Welcome to new arrivees Oldrich Kucera at Beaverton and Esther Nagel and Donald Sheets at Warehouse.

CARTOONIST BOB Perry has vivid recollections of the Tek family picnic, particularly the Warehouse-Requirements softball game. Here's how it wuz, he says:



KING'S SLOW FAT ONE, OR "CANTALOUPE" ANYONE! R. PERRY

COMPONENT PRODUCTION TOOLING

With ever-increasing production schedules to meet, automation is the answer for many operations. A good instance is making cathode ray tubes.

Rodding the electron gun was formerly done by applying one rod at a time, which was time-consuming and accounted for many alignment rejects. **Ken Lawrence** engineered a new process for applying all four rods at the same instant. **Lee Karr** and **Carl Lukens** did the mechanical design, built the machine and put the new process in operation early in July. It proved very successful on the 50% gun, increasing production 50 per cent and greatly decreasing alignment reject.

More simultaneous automatic rodding stations are now being built and most gun types soon will be rodded automatically.

Another time-consuming operation has been preparing glass rods for use on the station. Rods are sprayed with a mixture of sodium silicate and red lead to "bleed off" the surface charge. This was previously done by hand. A new method was needed, not to boost quantity but quality, as hand spraying left voids.

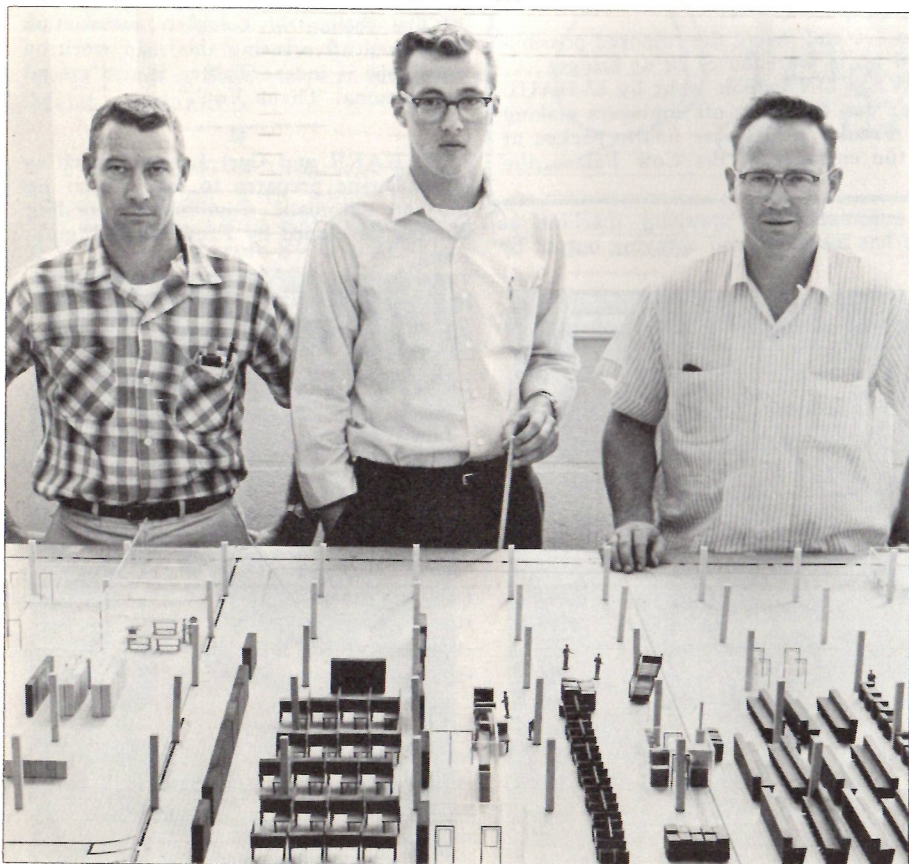
Orville Withey developed a new spraying process, then designed and built an automatic machine to do the job. Quality of spraying is excellent, and it turns out 3000 rods an hour, compared to 500 rods when hand sprayed.

Component Production Tooling is engaged in engineering and manufacturing specialized equipment. These are two good examples of forward thinking in the realm of automation.

SMALL TOOL JIGS & FIXTURES

Cal Watson had a misfortune last week on a trial run with his go cart. Cal and the cart hit a tree and Cal came out with a broken leg and a nasty laceration. With leg in a cast and laid up for five or six weeks, Cal would like to sell a slightly used cart—nothing down and 48 small monthly payments.

MODEL BEING constructed of proposed new Tektronix assembly building is shown by (from left) **Wally Blackburn** (Production Engineering), **Merl Winjum** (Assembly) and **Joe Almand** (Production Engineering.)



New in our group is **Carl Stephenson**. For the past six years he has been employed with Montana Power Company as a power plant operator at the Mystic Lake dam.

CABLES

Virginia Nielson is transfer from Pre-Pak.

When **Ada Reynolds** returned home from a vacation in Wisconsin, her husband had a new Studebaker Lark waiting for her.

Irma Breazile and husband **Art** (Shop) have returned from a trip to Seattle and British Columbia. Here they are on the Grouse Mountain ski lift. →



MECHANICAL ENGINEERING

Joe Almand of Production Engineering and **Merl Winjum** of Assembly have created these one fourth inch scale models to plan floor layout process flow and materials handling. Models are used to better visualize the production system. In a two-dimensional layout on paper, height is not shown and the process of flow cannot be as accurately described. Floor plan is drawn on a one fourth inch squared sheet of acetate plastic. Walls are made of plexiglass for visibility. Bench models, carts and shelves are made of balsa wood to exact scale.

Maury Merrick is new to the mechanical engineering section. Maury was in charge of product development and engineering at Sawyer's, having spent 12 years there. He has attended Reed college studying math, physics and engineering. Maury has three boys and two girls. His hobbies are camping and fishing.

CABLES SWING SHIFT

We had a potluck for those leaving swing crew. **Barbara Losli**, **Merlene Wareking** and **Dorothy Nesbitt** go on days.

Delores Kaaunwai flies to Kapaa Hawai,

which will be home from now on. **Phyllis Kingston** and **Bonita Nance** return to school at Pacific University.

A congratulatory supper was given **Phyllis Joseph** by the p.m. girls and friends at the China Lantern August 6. She will be married to **Phil Steward** of the navy at a very early date. He will return to the service after a short leave and honeymoon.

STAN SAETY'S GROUP

Welcome back to **Edith Gross** who has been enjoying a six weeks leave of absence.

Hope to see **Bud Ramsdell** back with us soon.

Beth Cunningham leaves for college next month to major in liberal arts and Spanish.

A good time was had by us all at the Tek picnic. A vote of thanks to the gals who did such a marvelous job on recreation committee: **Doris Gibbons**, **Jean Jackman**, **Helen Johnson**, **Doris Flynn** and **Gin Gilbo**.

MARSHALL'S GROUP

Our group had a sheet wedding cake for **Bob Randall** and his bride-to-be August 21. They received a nice gift from Tektronix and several from our group.

Winnie Webster and **Florence Brown** entered the Tek bowling tournament and came in third in doubles class A. Florence was first in singles class A and second in all events.

FRANK WHITE'S GROUP

Jean Bue is leaving after working here since 1956.

Vale Maynard and her husband **Orv** won two records in a dance contest.

UNIT WIRING, SWING

The latest in **Bill Mayers'** group is **Bill** going on vacation just at wage review time.

Candy Pierce is recuperating from a broken finger. Car doors are dangerous!

Sara Daughters is leaving for school. **Delores Jarvis** went on maternity leave. **Marlene Hunt** left us for accessories.

We also have a few new ones; **Margaret Fredericks**, **Jan Hawkins**, **Katie Herschell** and **Pat Unger**.

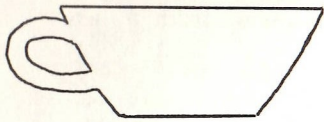
ROGER NOYES GROUP

There has been quite a switch in our group. **Nina Rose**, **Coral Mayor** and **Doris Cushman** went on days and **Olive Moser** became a night owl. **Gloria Kamna** is back from a leave of absence just in time to replace **Ginny Herb** who is starting a leave of absence.

Lois Meeuwssen is flashing an engagement ring. She's officially hooked **Les Vandehey** (finals.)

Larry Sutton, **Elaine Carothers**, **Mishka Morgus** and **Janet Paulson** vacationed this month. **Les Hunter** filled in as "utility man" while **Larry** got away from it all.

Several new faces have been added to our group: **Virginia Mick**, **Gerry Taylor**, **Diane Hague**, **Jim Mathis**, **Don Dwyer** and **Betty Rose**.



COFFEE BREAK

... WITH TOM WILLIAMS

Governor of Oregon, Mark Hatfield, was the featured speaker at a luncheon organized by the State Economic Planning and Development Department and held in connection with the WESCON show in San Francisco. Howard Vollum attended as a member of the Advisory Board to the department. The Governor's talk was felt to be effective in making known to heads of large electronics firms the opportunities for plant sites and labor market in Oregon. Other top people of the industry such as Bill Hewlett of Hewlett-Packard and Les Hoffman of Hoffman Radio attended the invitational affair. Mayor Christopher of San Francisco was there in his official capacity and from the field of education and science, Dr. Frederick Terman of Stanford University.

Howard felt that opportunities for expansion in Oregon would create most interest with those companies whose facilities and subsidiaries are already dispersed. Similar efforts by the State Economic Planning and Development Department will be made in the future to attract other industries to Oregon.

Not a new word, but being used for the first time in technical writing dealing with the specifications of our new instruments, is the term **nanosecond**. Meaning .000000001 of a second, the term is now necessary because the writing time of advanced instruments makes possible the observation of phenomena occurring in this decimal of time. Other manufacturers have named instruments by time terms, one is called the NANOSCOPE, another the Milli-Mike... short for millimicrosecond.

This is another sign of the times. Recently a news release quoted a source from the Bureau of Standards as saying that new measures must be devised to properly describe the unit of thrust on missiles, the unit of illumination now known as "full daylight" and the other quantities that have now become measurable and need standardization. As new frontiers in the field of physical sciences are reached and spare technologies develop, more new terms and heretofore unfamiliar ones will come into use. It is interesting and significant that Tektronix instruments are being described with new terms that indicate further progress and new application to come.

IN THE TRADITION of the show must go on... and facing the rumored possibilities of shipments into San Francisco being held up in warehouses or at bridges... last minute instruments and materials for the WESCON exhibit went by U-HAUL trailer hooked to the rear of one Frank Thomas's car. Fighting off engineers making last minute adjustments to their pride and joy, Frank's trailer was finally packed at 9 p.m. Saturday. Driving straight through to the entrance of the Cow Palace, the gear was ready for the set-up Monday Aug. 17.

ORVILLE WITHEY checks operation of automatic rod spraying machine as **Mararget Moerkes** reloads the hopper. Machine has increased rod spraying output by 600 per cent.



Customer Praises Prompt Service In Field Report

Prompt, courteous service by a Tektronix field maintenance engineer at the Boston office brought a letter of appreciation from engineer Edward L. Danahy of Infrared Industries Inc., Waltham, Mass.



Mr. Danahy praised "the conscientious work" of Frank Burton (Union) temporarily working out of Boston.

The letter stated, in part:

"Our Tektronix scope, an integral part of our engineering test facilities, became defective. Your advice was to have it brought immediately to your office. I delivered the scope and spent three and one-half hours watching Mr. Frank Burton completely overhaul it. Time lost by our department was negligible because of your courteous service.

"It is refreshing in this day and age to find people who still believe expediency is no substitute for quality and excuses no substitute for thoroughness.

"The feeling of complete satisfaction I realized after seeing this man work on our scope is indescribable. Please extend our personal 'Thank You'."

LEE KARR and **Carl Lukens** watch as **Rose Duane** prepares to load a gun jig into an automatic simultaneous rodding station, developed by Production Engineering.



PROBABLY YOU WON'T recognize this gal:



Try again, in a more typical setting:



Righto. It's messenger Nancy Lundeen, who's been quietly traipsing about the plant all summer long hidden behind a yellow pile of inter plant envelopes.

"The gal who asks all the fool questions," she's knowed as—or so she claims. She particularly pestered engineers, and for good reason:

Seventeen-year-old Nancy, who commuted 80 miles daily to and from McMinnville ("I get two hours of sleep that way") not only has left for M.I.T. to study up on physics, but did it the hard way—namely, on a \$1500-a-year National Merit scholarship.

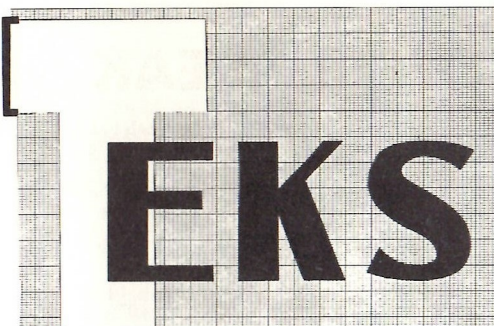
THIS WAD of cash was earned in competition with some 100,000 US students. Only 800 grants were given, ranging from \$100 to \$1500.

As a high school senior, Nancy took only a half day of classes and busied herself the other half by completing 18 hours at Linfield college, in physics (straight A's) and calculus (B, she blushes for shame.)

With this sort of performance, probably Tek engineers would've rather had her stop asking questions and start giving them answers.

FRANCES PIERCE (Cables) drove round a curve on Cedar street in early August and bumped a jay-walking deer so that it was deceased.

Beaverton police sped to answer her call and, unable to locate an ordinance covering inadvertent deer-bopping, let her go—minus the corpse, which they trundled off in the prowler car.



HARLOW LOUCKS (Silk Screen) tells of a wee printing problem—namely, our new capacitor diode, a mere 3/8 inch long and 1/8 inch in diameter.

On it they must print:

1. A six-digit part number;
2. A four-digit date code;
3. A diode symbol, and
4. The Tektronix bug.



"THE BUG COMES out nice and clear, too," alleges Harlow, as if anybody could tell for sure.

You can spot him easy. He's the one with bloodshot eyeballs.

LITTLE SON of a Beaverton Tek was nipped by a chimpanzee, according to a rumor now running loose.

This is middling rare. You don't hardly see chimpanzees no more.

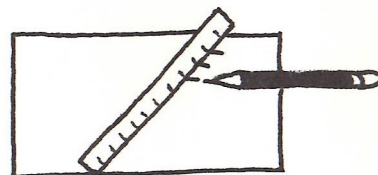
Report is unconfirmed and, what's more, may be garbled up. Maybe the boy bit the monkey. Probably not.

Only compensation for gettingchimp-chomped is hereafter, if anybody should up and ask him, "Were you ever bitten by a chimpanzee?" he can honestly say, "Yes, I was."

PAUL WRIGHT (Photography) relays today's helpful hint, which he scrounged from a nearby magazine:

"Know how to divide a page into an odd number—say 11ths?" asks he, going on to answer his own question.

On an 8-inch page, for example, lay ruler diagonally across paper until the span is 11 inches:



Then make marks at each inch.

This gem of thought is passed on without charge—another service of the smiling photo boys.

ONE TEK, back from WES-CON, has naught but bad words for California bus service.

Billeted 30 miles from Frisco, he commuted both ways every day. Time required, round trip: Four hours, 20 minutes.

Didn't get to look at much of scenic Sunny Cal, but what he did see, he saw very thoroughly.

FRANK MANIATIS said he was going to shear his mustache August 21, so a photo was taken to show its last day on earth.

A week later he was walking about with the Centennial brush still attached. Wife made him keep it, heh heh heh, he grinned.



Here's the photo anyway. Frank and the mustachio may be seen in 3-D, daily in Militarized Products.

TEN YEARS



ROSE AVERY



JIM KELLY



VERNA DOBSON

Ten-Year Tek Employees Honored By Co-workers During August

Deane Kidd heard congratulations of members of the Engineering department in which he works at a special coffee break in his honor as he passed his 10 year point with Tektronix.

Deane came here with and E.E. degree from Oregon State college in 1949. He had worked in previous summers for Montavilla Radio and Oregon Electric. Uncle Sam tapped Deane for a stint in the Signal Corps and he was on leave from the company from late 1953 until 1955 when he returned to work in Engineering.

Jim Kelly of the Production Engineering department joined the "old hands" early in August and was accorded the order of cut-cake and coffee-cups-aloft by members of his group.

Jim's work has been mostly building and designing heat treatment ovens and kilns for various processes needing them. He's a machinist of long standing, having been with a ship repair unit of the U.S. Navy and doing electric motor bearing and repair work before coming to work for Tektronix in Shop.

Rose Avery, now a trainer in Unit Wiring, has spent 10 years largely in the as-

sembly departments and pre-production. She has had leaves during this time to increase her family responsibilities which now number 3. As only Unit Wirers can do it, her tenth anniversary was adequately recognized.

Verna Dobson accepted verbal bouquets and broke cake with her friends to mark her tenth on August 25. Verna is supervisor of the Coil group in the Transformer Department where she has worked since coming to Tektronix. Her previous experience in industry was with Iron Fireman in assembly work.

LET'S TALK SHOP

Imogene Sky, previously of Silk Screen, transferred into Accessories. Forrest Schuh is now with Quality Control in Shop.

All the archers are anxiously waiting for the deer season to open on the 5th.

Wally Couture's wife Virginia is taking over the TWX job. She worked for years at Western Union.

Ruth Haugsten has transferred from Export and is in the Shop office. She's an oldie (3 and one half years) at Tek.

Scopemobile and part of Plastics will move into the new Retirement Trust building soon.

Shop would like to thank the recreation committee for another grand picnic. Shop employee Bob Mitchell won the grand prize, a trip for two to the Dorchester House.

Willie Franck has transferred temporarily into Ceramic Engineering from Screw Machine.

Clyde Feituish is busy building and planning his new home.

DELAYED LINES

New group representative is Esther Cookman, alternate Geneva Gaynor and social director Virginia Halverson.

Melva Craven and family were in an automobile accident August 9 in Oklahoma. She received a fractured pelvis, George a few cuts and the three girls bruises. They were returning from Boston.

Charlene Wolhed, a bride-to-be, attended a shower and was the winner of a wedding gown.

Mary Kingsley has a new baby boy. Our new girls are Annette Payne and Lela Palmer.

Verna Dobson was given a 10-year reception August 25.

Geology Clubbers View Colored Slides on Alaska

Colored slides of Alaska were shown by Helen Ross, Ceramics, at the monthly meeting of Tektronix Employees Geology club, held at Community Church of Cedar Hills August 26.

She was among two carloads of rock-hounds which went behind the Arctic circle in Alaska in late June to hunt for rocks. The group traveled over 7000 miles.

While there Helen found a mammoth tooth and some petrified bones.

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