TEK TALK

VOL. 1 NO. 7 MAY, 1952

TEK TALK 1 YEAR OLD

One year ago, in May 1951, Vol. 1, No. 1 of the publication that was to become Tek Talk appeared.

A plant paper had been considered for some time previous to this first release. It appeared that a paper would be an effective medium for bringing Tektronix employees closer together besides being a logical method of disseminating information of general interest.

HOW ABOUT THAT ARTICLE YOU PROMISED US FOR THE FIRST EDITION ?!!!

As everyone must realize, the difference between an idea and an accomplishment may be measured in tears, toil and tribulation; this may be witnessed by Kit Vollum and Eleanor Lofton, who edited the first edition. A short history of Tektronix was written by JACK MURDOCK for the first page. DAL presented a report of our exhibit at the I.R.E. show in New York, and BILL WEBBER noted the transactions of the Employees Committee

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524 NEAR PRODUCTION

The Tektronix Type 524-D oscilloscope is headed for production. You heard about its being displayed at the trade show in New York, and from now on, you will hear discussions about its production. At the present, plans are for the first production runs to begin in July. Our customers will be looking for some of their units during the third quarter of this year. They are priced at $1180.00.

The 524-D is specially designed for television work. It will be used in TV transmitters to check all video waveforms and studio equipment. With the release of the television freeze, new TV stations will be making their appearance all over the country. These, along with present TV stations, provide a large market for our 524-D.

Since this instrument is specialized, it should make a hit with the industry. For instance we demonstrated it to RCA who is one of the largest television transmitter manufacturers and one of our best customers. They are thinking of including one or two of our 524-D's as essential accessories supplied with each transmitter which they put into operation. The future of the 524-D looks excellent so you will be hearing more about it.

* * *

SCOPE CLASS STARTS

If you hear JURI KAUK and BOB COGAN discussing bandwidth problems (excuse me, HOWARD, "rise-time") of an oscilloscope amplifier, don't be surprised. They're members of the newly organized Scope Class. The class is the result of many people expressing a desire to design and build an instrument for personal use.

MILES TIPPERY, who started a survey of the interest for such a class, found that more people wanted to join the class than could be accommodated at one time. As a result, a second class has been scheduled at a later date.

The following committee members are planning the details for the class: JURI KAUK,

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VOL. 1 NO. 7

MAY, 1952

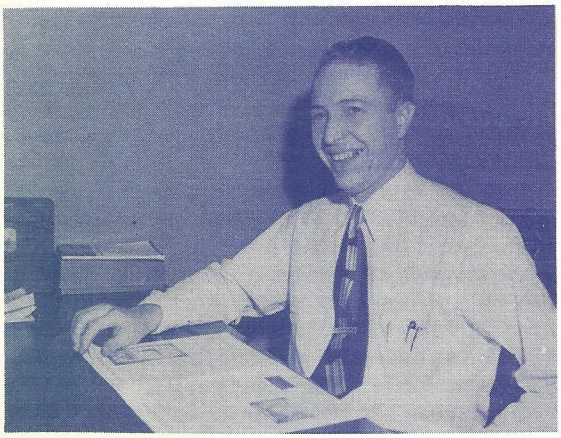
EDITOR Blanche Cook

CONTRIBUTING REPORTERS

Marian Arnold
LaVerne Baim
Vern Bartlett
Lois Campbell
Jack Clark
Edith Groshong
Will Marsh
Dick Montag
Bill Muessig
Jack Neff
Ida May Norby
Jean O'Brien
Scotty Pyle
Dorothy Reeves
Neva Satterlee
Dick Schmidt
Earl Scott

Ed Egan, photographer
Ken Walling, printer

TRANSFERRED TO BALTIMORE TERRITORY



The cheerful grin of FRANCIS FROST has been missing from Tektronix since April 15, when the entire family Frost took easterly flight. At Detroit, Michigan they will pick up a new car and continue eastward to Baltimore, where Francis will help ED BAUDER cover the fertile Baltimore territory in the exciting job of dispensing the Tektronix friendly atmosphere and discussing Tektronix instruments.

Francis was born in Portland, and after an appropriate length of time attended Benson Polytechnic high school. For several years before the war he worked for JACK MURDOCK, repairing radios. He served in the Navy from 1942 until 1945 when he was honorably discharged as a Chief Radio Technician. It is interesting to note that while in uniform it was with considerable difficulty that he managed to resist the overtures of many beautiful women, that is, until after he left the service.

Francis had his own repair shop for a few years, after which he served as broadcast engineer for KEX and then KGW. In September 1949 he joined Tektronix and since then has been a bulwark of the Test and Calibration Department besides offering valuable assistance to the Engineering Department from time to time.

When requirements recently arose for a man with technical ability, personality, and enthusiasm, the searching finger of Sales pointed at Francis. At first he looked around to see who was in back of him, then after lifting his eyebrows in a "who, me?", he capitulated and began selling off the tons of radio junk that collects around any radio man like weeds in a posy patch. There were undoubtedly some difficult moments with his pretty wife, Margaret when a choice had to be made whether to discard an old colonial tube tester or discard an occasional chair with a hand-buffed seat. Even seven-year old Nancy Jo made a sacrifice; she magnanimously awarded JACK MURDOCK one of her twenty dolls.

Francis will really be missed in the plant, but the many friends he will make for us in the field will well account for his absence.

* * *

Anyone who has missed GEORGE EDENS is advised to look around the Sales Department. There George will turn his interest from amplifier response to customer response.

ALICE WYNN is trying out her hand in taking over BOB LIVINGSTON'S job of finaling. Bob has gone to the stock room. Good luck to you both.

LEONARD MASON is in charge of the new 524. So far he is going along fine on his one-man venture.

* * *

BOB DAVIS joined the Tektronix staff in July 1948 and will be celebrating the completion of his fourth year here instead of his fifth year as stated in the last issue of Tek Talk.

* * *

Five more people have joined our list of employees during the past month. They are GENEVA KOBBE, Office, LILLIAN WALKER and JUNE GAGE, Cables, ARTHUR ENRIGHT, GEORGE EVELSIZER and DON KEPLER, temporarily in Assembly.

* * *

CLAIR KIDD, 511 and 514 swing, GEORGE SCOTT, 512 and Special day, JACK TATE, Shop swing, and ALDEAN FEITUSH, Transformer day were recently elected representatives of their groups. They succeed KAY BARKER, ROSE AVERY, BURT EBERLY, and MIKE PARK, respectively.

FIELD MAINTENANCE

WILL MARSH, genial front-office Field Maintenance Engineer, came to Tektronix in September 1950 via Test, from the U. S. Forest Service Radio Lab. An emigrant from the land of Philco and RCA, Will got his engineering education at University of Alabama, spent three years in the airplane Navy toying with guided missiles, where, in addition to engineering duties of various sorts, he attained a notable standing in military circles as a Hangar Officer (let's have a clean sweep, men). Eventually he found a confortable chair at Naval Bureau of Aeronautics in Washington, but was forced back into civilian life by the termination of the war. Will is not an active reservist.

Will heard of the West while in the Navy. After becoming part owner of a mine (small, gold or something) in Nevada, he joined the F.C.C. and a Wave ensign of his acquaintance in Twin Falls, Idaho, transferred to the Forest Service in Portland, and became the father of Betsy, now three years old. He commutes daily to his farm in the shadow of Mt. Hood, 25 miles from Tektronix.

Will is a consistent contributor to the paper. He wrote the stories about JACK DAY, DAL, MARJ DRAIN, MRS. BROWN in the Nibbler's Nook, EARL SCOTT, MARIAN ARNOLD, BOB POULIN, and FRANCIS FROST. He is also responsible for the following article.

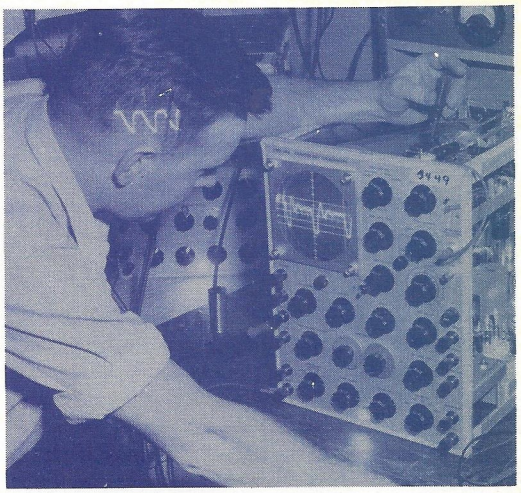
* * *

A vital, as well as decorative factor in the Tektronix Field Maintenance program, is chic, fun-loving MARY SOPER, complete with beautiful brown eyes. That liquid voice asking for information in the stockroom squawk-box is Mary taking the first steps in helping some distant customer repair his scope. Waving packing slips like a battle banner, she tracks down replacement parts in jig time. Influencing the shipping boys with that well-known smile, she has the package in flight before the customer goes home to dinner.

Mary is a native of Portland and a graduate of the High School of Commerce. Before coming to Tektronix she worked in an insurance office.

Currently there are two men in Mary's life. One is a fortunate fellow named Sam, whom she married some time ago, and the other is two-year old Roddy, who apparently gets most of her attention. Besides them, Mary likes ice skating, photography and ceramics. In case you gals would like to know how she comes by the nice clothes, well, she makes them with her own carbon-smudged little fingers. She's cute, too.

* * *



BUCK MURPHY had always wondered why his head sometimes felt as if a waveform were roving around. One day "Doc" ED EGAN took a photograph of Buck as he was diligently checking out a 511. The above photograph is the result. Little did Buck realize that a waveform was actually floating around in his brain. Several other doctors have examined Buck's head, but they could not find anything.

Maybe this phenomenon could be classified as one of the "Seven Wonders of Tektronix". The Test Personnel are keeping one eye on Buck, feeling that his situation may be contagious. Don't be alarmed if Buck's head begins to move around, because it is only the little "green worm" doing its tricks.

* * *

TROUT DERBY

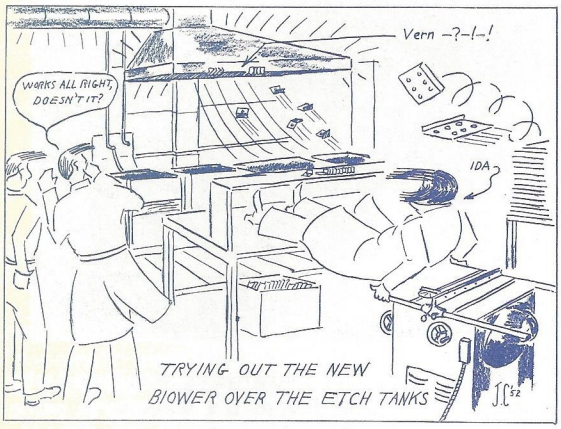
Hurry, hurry, hurry. Come on guys and gals. Let's get going on the Trout Derby. It started April 19 and lasts until October 12 and only costs $1 per person. Remember it was a girl who won it last year.

ETCHING DEPARTMENT

The little group of men blowing pipe and cigarette smoke in an upward direction in the etching department April 7 were not trying to smoke the bees out of the vent pipe but were testing out the circulation in the new hood and exhaust system installed that day.

Yes, the etching department is proud to announce the acquisition of a new stainless steel hood over the caustic and acid baths.

Designed by MEL LOFTON, the hood has a top vent which extends through the wall into the quonset hut where a large blower has been installed. Above this is a venturi system inside the vertical duct. This system creates a reduced air pressure inside the hood, causing a circulation which draws the caustic and acid fumes out of the shop and then up through the roof.



Attached to the hood is another one to be used for drawing off fumes from muriatic acid used in soldering brass chassis and transformer cans.

Mel Lofton conducted experiments with a scale model of the hood before the go-ahead was given for the final construction and the result is an efficient exhaust system for the pungent fumes in this department. The etching process is interesting in that it is a unique chemical action. When aluminum is immersed in the caustic soda-hot water bath a violently boiling action takes place. This continues as long as the aluminum remains in the bath and cleans the surface, leaving a finish from a silvery appearance to snow white according to the length of time left in the bath.

When you pour drain pipe cleaner down your sink drain you are actually duplicating the etching practice. Aluminum filings and caustic soda boil away the grease in the pipes.

The caustic bath, besides cleaning, will reduce the thickness of aluminum, and, if left indefinitely the metal would dissolve completely, as it is soluable in caustics.

After this bath the aluminum is rinsed in hot water, then placed in a bath of nitric acid which neutralizes the caustic action and clears the residue brought to the surface during the etch process. This residue comes from copper, manganese and other alloys from which aluminum is made.

From here the part is washed in clear hot water, dried and sent to the paint department where clear lacquer is applied to prevent stains and smudging from finger prints, grease and so forth.

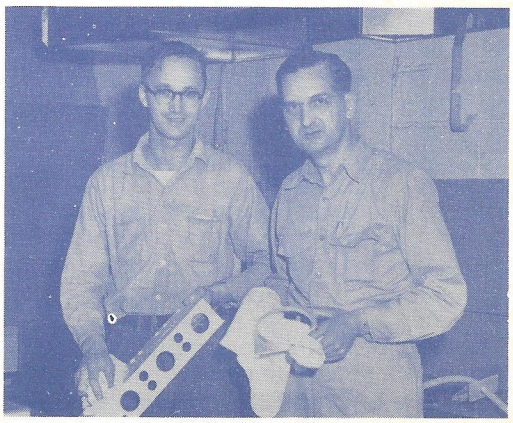
The etching process is just one more detail which helps make our scopes the outstanding instruments they are today.

RON WOLD, who is now holding down the swing shift etch operation, is the proud owner of a new baby boy and a 1950 Hudson limousine.

He has more family, too, including his wife and two more boys, aged four and two-and-one-half.

Ron was born in Norway and came with his parents to Tacoma, Washington, then to Portland. He now has his own home in Marlene Village, near Tektronix. Since coming to work September 10, 1951 he has done numerous jobs in the shop.

Ron's hobbies are fishing and home-making. He is always making something for his house or yard. He is also attending Multnomah College learning accounting.



Equally busy is VERN BARTLETT, day shift. He spends his "spare" time with music, playing in Jay Howard's orchestra, writing dance arrangements, having fun with magic, building lots of his own equipment, being an assistant Cub Scoutmaster and wondering how to operate an acre and a half without a garden

tractor. He also has a photo finishing plant at home in which he does finishing by mail.

When he is not doing anything else Vern etches for Tektronix. He says etching is just like photofinishing except you can see what you are doing, and it's not nearly so disgusting. September 10, 1951 was his starting day at Tektronix.

WELDERS

The Welding Department, located in the shop, is one of the key departments in the plant; for it is in this section that weld fabrication is applied to mounting frames, cabinets, chassis, shield rings and other parts. In this section, too, clamps and other small items are spot-welded.

The welding department is well equipped to handle any welding job that might arise in the plant. There is acetylene welding equipment for use in silver soldering, brazing, annealing, etc. A special welding machine is used for bandsaw blade repairing, and there is another special machine for spot-welding shields, brackets and rings.

Tektronix was one of the first manufacturing plants on the West Coast to use the "Heliarc" process on welding aluminum. Basically, "Heliarc" differs from conventional arc welding by using an inert gas instead of a flux. The gas provides an atmospheric barrier around the weld "puddle" and prevents oxidation and other contamination from the surrounding air while the welding is in process.

The argon gas and water are supplied to the torch holding the electrode through flexible tubes. In "Heliarc" welding, the power leads that heat the tungsten electrode to 2200 degrees for aluminum welding are water cooled by being incased in a vinalite tubing filled with circulating water.

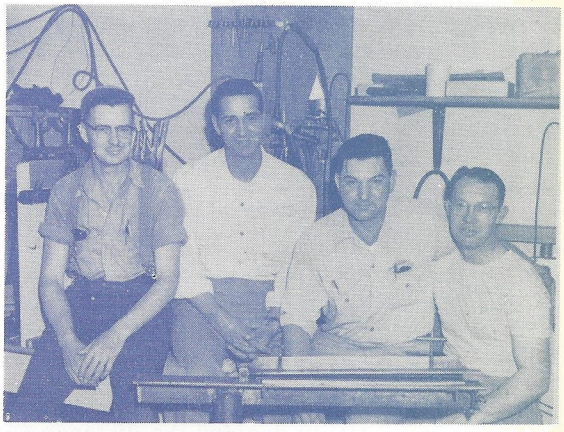
The cost of refilling an argon gas tank is around $30 and a tankfull is used about every two to three 8-hour shifts. Four or five tanks are kept on hand all the time.

Jigs are used for accurate welding and an average of forty cabinets can be welded on one shift when using two welding machines on them.

The arc flare in welding creates a sunburn blister on exposed skin so a full face-protecting hood must be used.

According to VIRGIL HALL, oldest welder with Tektronix in point of employment, a fine spirit of cooperation exists between the four welders on day and swing shifts. Virgil, now working swing shift, did carpenter work for several contractors for four years before joining Tektronix in June, 1949. Virgil is married, lives in Lents, and his hobbies are woodworking and fishing. He recalls that in 1949 when he started with us, 57 people were employed compared to approximately 320 now, and the average monthly production of scopes then was 75 to 100 in comparison with around 400 per month now.

AL BRIGGS, welding on day shift, has been with us since September, 1949. Prior to that he was in Alaska doing welding repairs on gold dredges. Al says ten to fifteen welders were kept busy around the clock keeping the buckets and flumes of the dredges in repair. Al is married and has three girls and a boy. His hobbies are gardening and heavy carpenter work, and Al means heavy. Moving a wall or raising a porch has Al right in his glory.



L to R: S. Hughes, J. Gayton, V. Hall, A. Briggs

STEVE HUGHES, our other welder on swing, came to Tektronix in October 1951. He formerly worked for Portland Wire and Iron Company. Steve is married and has two boys, six and eight, and a girl, fourteen, who is a student in Gresham High. The Hughes' home is near Gresham where Steve has about three acres devoted to the raising of Filberts. His hobbies are farming and photography; and one of his prize possessions is a black Angus yearling named "Snowball".

JOE GAYTON, who welds now on day shift, started with Tektronix in July 1951, after working about a year and a half with the Fowler Manufacturing Company. He also welded for Caterpillar Tractor in Peoria, Illinois, for almost two years. Joe is married and has three children, a girl eight and a boy and a girl who are six year old twins. His hobbies are woodworking and all kinds of sports, including bowling and basketball in which he takes a keen interest when time permits.

* * *

TEKTRONIX TWOSOMES

JEAN and FRANK KOPRA lead a very busy life with their three boys....Buddy, four and a half years, Billy, two and a half years, and Dick, one and a half years old.

Jean drives to work in the morning and leaves Frank home with the youngsters. Frank comes to work on the swing shift and Jean takes over at home.

Jean has been with Tektronix since June 1951, and wires on 513 video chassis. Frank works in Test, and he came to work in May 1951.

Frank is a radio ham, now inactive, and Jean says, "Who has time for hobbies with three little boys like ours".

They are renting a house near Beaverton so they can be near the plant. They moved from Vancouver when they decided the distance was too great for each of them to drive to work on different shifts.

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BONNETS AND BOOTEES

Mr. and Mrs. RON WOLD are the proud parents of a baby boy, Neil David. Neil was born March 25 and weighed 8 lbs. 9 oz.

Kay and GEORGE EDENS announced the arrival of a boy, William Stephen, 9 lbs. 11 oz., on April 22.

At the moment of going to press, Virginia and BILL POLITS report the arrival of their first child, a boy, 8 lbs. 13 oz., on April 29.

* * *

RAY GRECO, Transformer, was married Friday night, April 4, at Vancouver. Ray and Goldie had a church wedding and afterwards drove to the beach for a weekend honeymoon. Congratulations and best wishes to you.

* * *

ALDEAN FEITUSH, PHYLLIS GLYNN, DELLA FORTIN, JEAN PEARSON, and PAT CARSON have been missed at their benches because of illness.

160 IN PRODUCTION

In April, we started limited production on the Type 160 series consisting of a regulated power supply, pulse generator, and waveform generator. These units were developed by DICK ROPIEQUET in collaboration with Dr. Archie Tunturi and Dr. John Brookhart of the U. of O. Medical School and are primarily for use in studying the nervous system.

In a typical application, a voltage pulse from the 161 is used to stimulate a nerve in one part of the body of an animal and the response is picked up in another part of the body by a 512 oscilloscope and a 122 preamplifier. The 162 is used to establish the time interval between pulses as the nerves will not respond in a typical fashion without a certain period of rest between stimulations. This enables the observer to study responses obtained from a controlled pulse, nerve pathways, brain nerve centers, and time lag between stimulus and response.

We are being pressed to produce the 160 series sooner than planned due to the demand of the medical research centers throughout the United States.

BEAUTIFICATION

There has been lots of activity outside our plant lately -- things like rototilling, plumbing, and planting. The new landscaping makes a welcomed improvement in the outside appearance of Tektronix.

Rhododendrons were planted on the east side and camellias on the south. Azaleas are interspersed all around. On the south, there is a new lawn complete with an underground sprinkling system. The planting boxes are filled with a multitude of things such as andromeda, daphne, azaleas, and juniper.

Some of you may be interested to know that all of the rhododendrons and a good share of the camellias were obtained through the West Hills Nursery from the Charlie Vollum estate (Howard's and Larry's father). All of the planting and landscaping was done by the Cedar Mills Nursery.

* * *

The young lady eyed her escort with extreme disapproval. "That's the fourth time you've gone back for more punch, Albert," she said coldly. "Doesn't it embarrass you at all?"

"Why should it?" the young man shrugged. "I keep telling them I'm getting it for you."

WELCOME HOME, PEARL

Pearl has been found. Who is Pearl? Not Knit One's sister as CLIFF MOULTON would have it, but then Cliff who lives in a world of microseconds and capacitors can't be expected to know that Knit One's sister spells her name Purl. No, Pearl is the eraser who lives at the switchboard. Her full name is Pink Pearl, but we will just call her Pearl for convenience.

Pearl is not just an ordinary eraser, for on top of her erasing duties she has been found very dependable for carrying messages from one switchboard operator to the next and at times from the Engineering Department to the front office. In fact, she has become so famous for her accuracy in relaying messages that HELENE SCHMITT has had engraved in bold letters on her back "DON'T USE THIS FOR AN ERASER".

Legend had it that Pearl had once been lost but was found by an owl in an oyster. The veracity of this legend has not been determined but we do know that Pearl was recently lost. At first, little attention was paid to her disappearance for all good erasers have a right to slip under a typewriter now and then, or even to slide behind the switchboard just for recreation.....erasers can't ice skate, you know. However, it must be remembered, Pearl is not an ordinary eraser and Pearl was not found in an ordinary place.

Late one evening BUD JONES of the Shipping Department was going through all the necessary motions of shipping a scope to a Tektronix customer when he noticed a strange lump in the Instruction Manual. Close investigation revealed Pearl hiding among the schematics. Yes, Pearl has been found and returned to her rightful place at the switchboard...WELCOME HOME, PEARL.

P.S. For facts concerning Pearl's new companion, Pinky, see Helene.

CHATTER

BILL JOHNSON and BURT EBERLY, Shop swing, recently received their General Class Amateur Radio Licenses. They each plan to operate on 10 meter fone and 10 meter mobile. Bill's and Burt's call letters are respectively W7QF and W7RKG.

SAL VALLERIO commented that the girls in his department are so easy to get along with. The other day he found a piece of wire in the bottom of the chassis. On speaking to the girl about it, she replied "Oh, that just fell out, I guess".

CHATTER

One day recently CHRIS LARSEN was the lone witness to a lively little schottische featuring HELENE SCHMITT and LOU WITTER in the hall near the accounting office. It seems Lou came out of one door and Helene out of another; they confronted each other, stopped, Lou bowed and Helene curtsied, then they each took two steps to the left, then two to the right, then stopped, etc. They tired of this after a few minutes, since there was no music, but Chris thinks they will have a gold mine when television comes to Portland.

TIM KIRTLEY, Transformer, has returned from his travels with the men of Uncle Sam's Navy telling many colorful stories of his activities as a reservist aboard a Submarine. His group was assigned to operate with the fabulous "frogmen". Tim is still unable to account for a letter he supposedly wrote to his fiancee from San Diego. Do you suppose?

It has definitely been established that CARL HELMER'S, Transformer, car is a 1941 Ford. Speculation had it ranging from a live bait barge to a swamp buggy; all bets have been paid off since Carl persuaded his two daughters to wash his vehicle.

When the Naval Reservists toured the plant recently, LOIS CAMPBELL was surprised to discover that she had taught several of them in high school.

IRENE PARSON'S mother arrived from Scotland for a six month visit.

ED BAUDER, Baltimore, has a new dark red Nash Station Wagon that has a back seat that lifts up and folds down to make a nice little platform in the back. It will hold a scope-mobile, several scopes, and on occasion, the two littlest Bauders.

AGNES CLIFFORD, Coils, has been forced to eat lunch at the plant since she and hubby DON, Test, have moved further on down the highway to the Marlene Village District.

Congratulations to BOB COGAN, Transformer, for receiving only a warning from a Washington County patrolman. "How did I know they drove '50 Mercs.", says Bob. The following day a small boy on a tricycle passed Bob on the highway.

Several people have complained about DICK TOLLISEN singing as he wanders past the 511 Group. It disturbs their sleep. They request that he sing lullabys---softly.

Since HAROLD EDMUNDSON'S promotion he wants to be addressed "Yes Sir, Sir".

KENNY KING bears the title "Our Glorious Leader" in the 511 Group.

Cont'd from page 1

Meetings. HOWARD VOLLUM submitted the meaty but concise discussion which might have been titled: "What are engineers good for, anyhow?"

The cartoon was done by Eleanor and the Leroy lettering by Kit; they collaborated on the bits of spice and seasoning.

In anticipation of greatly increased lithograph requirements a new multilith machine had been purchased by Tektronix. The paper was the first material printed with the new equipment.

After a hiatus of several months, during which Tektronix removed itself to the new plant, and crawled out from under an enormous backlog of work, publication was resumed under the editorship of BLANCHE COOK who devotes approximately one week out of each month to this work. Twenty-two reporters volunteered to represent different groups in the plant. Some of the actual writing is done in the plant, but much of it is done at home. If you see someone duck out of sight as Blanche appears, that is a reporter who has missed the almost-dead line for Tek Talk. After the copy is turned in, it must be edited for errors and erudition, and often trimmed to fit allotted space. Every reporter knows the anguish of having a beautiful piece cruelly hacked and mutilated merely to fit space.

The selected material is typed on a special IBM machine, which allows the operator to present even margins. The copy, photographs and headlines are pasted together and sent to town to be photographed on the special mats with which KENNY WALLING and BILL CAUSGROVE load the Multilith Machine. From here on out the machine does most of the work, in spite of what Kenny and Bill may say.

Since our major objective is to make people better acquainted with each other, groups of employees will continue to be presented each month in personality sketches. Semi-technical discussions of operations and processes will be offered from time to time also as regular planned features. News items of interest will, of course, be printed as they occur.

Cont'd next column

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SCOPE CLASS STARTS

Cont'd from page 1

JOHN MATTHEWS, SCOTTY PYLE, JOHN KOBBE and MILES TIPPERY.

The members of the first class will have the responsibility of proposing an instrument, selecting a suitable design, and guiding the instrument from the bread-board stage to the completed model.

LOGAN BELLEVILLE and HOWARD VOLLUM offered their past experience on scope designs by sitting in on the first two sessions and explaining the advantages of such things as direct coupling and slow sweeps, and disadvantages of trying to make too elaborate an instrument.

It was agreed that the vertical amplifier should be first design consideration, so class members are busy reading up on video amplifier design. Each section will be taken up in turn, and when all problems are solved and the design can be frozen, production will begin. The last step is expected to be the easiest part of the job.

* * *

SMILE

When you give a smile, you give something that is priceless yet costs nothing. Nobody can buy, beg, borrow, or steal your smile, because it is of no value unless you give it away in friendly greeting.

A smile takes but a moment, but its effects sometimes last forever. A smile creates happiness among friends, brings sunshine to the sad, and promotes valuable good will in business.

You don't feel like smiling? Then force yourself to smile. Whistle, hum a tune or sing softly--act as if you were already happy, and the smile will come. A happy smile comes from happy thoughts, not outward conditions.

It isn't what you are or where you are or what you are doing that makes you happy or unhappy--it's what you think about it. You'll find just as many happy faces among Chinese coolies sweating in the rice paddies for ten cents a day as you will among any similar-size group of business presidents in this country.

Smile!

* * *

No one has ever yet climbed the ladder of success with his hands in his pockets.