TEK RETIREE NEWS ExTek

Tektronix Retiree Volunteer Program TRVP

Web Page: www.tekretirees.org A Newsletter for and by Tek Retirees November 2014

Dear Retirees,

Please join me in thanking your retirees who take the time and interest to publish the newsletter.

A few years after leaving Tektronix I was asked to be Executive Director of the affiliate of Habitat for Humanity serving Beaverton and Hillsboro. It was a privilege and an honor to have been asked to share the Habitat story at one of the volunteer luncheons (2005 or 2006, as I recall). It was a great place to bring the quality, technical and ethical leadership I gained during my 37 years with Tek. Granted, I had some of the principles as a new hire in 1965, but Tek was the primary place where I could hone those skills. I found Tek to be a culture where I could endlessly seek out my next mentor and there are many to thank for their patience and tireless zeal. Not just sharing their domain knowledge, but for their operating at the very highest level of self-actualization.

I'm blessed to be in great health, and increasingly feel compelled to assert: "It's never too early to thank those who helped you through this journey called life.

Best regards,

Bill Gellatly

At Tek 1965-2002

Tektronix Plastics Department

by Al Foleen

In 1950 it all started innocently. Tek had been purchasing graticules for years, but as Tek's ability to get more precise measurements the inscribed lines on the purchased graticules were not good enough. The next question was, could we make a better one?

No one in the company had any plastic's knowledge so they contacted Jim Boyle, who had a small plastics shop, and asked him if he could make a better graticule. He came up with ideas to make the new ones much better. He asked the company to buy a large table saw to cut the graticules from a large (4X8) Plexiglas sheet. He then added a pan-o-graph (duplicating machine) to inscribe the graticules from a master pattern. Gene Brink was asked to operate this machine. The inscribed parts were placed in a jig and grooves machined in them which we then painted. The parts were then sent out to have the edges chrome plated. This was done to prevent any unwanted outside light to be inside the graticule.

Jim was then asked to help make an adjustable delay line. The engineering model was a nylon tube into which they wanted to embed two brass pins. When they heated the brass pins to embed them into the nylon tube they fell out when they cooled. Jim suggested molding the part with the pins in place but Tek did not have any molding machines.

This was the start of the plastics department!

The closest molding machine capable of doing the job was a toy machine advertised in the Popular Mechanics magazine. Jim purchased one to see if it would work, it did not have the capacity to make the part (coil form) but with the help of Bill Tescher they made a small molding machine similar to the purchased one.

Bill and Jim made a mold to make the part with the brass pins molded in place. Engineering wanted the tube between the two pins to be as thin as possible.

The very first parts had a wall the thickness of 0.006. When DuPont, who supplied the nylon molding material, said that it could not be done. We didn't know any different so we did it anyway.

There was a slight problem - nylon is very moisture prone. When we molded the parts there were holes in the parts from water vapor that would spit at the operator. We finally figured out that the problem was worse on rainy days than hot days. So we went out and purchased a bread drying oven from Franz Bakery. We put the cans of nylon in the drying oven before molding. Problem solved.

About this time the company business was growing fast. We were buying the control knobs from Chicago Molding. The more knobs we ordered the price would go up. When the price got to $ 1.00 each, Howard said "that's enough." So again he asked Jim if we could make our own knobs. Jim said yes. Bill Tescher made a steel model and sent it to California to have a mold made, one knob at a time. They cost $. 18 each. With that success Bill built an automatic knob molding machine.

The engineering and marketing people decided that they would redesign all of the knobs and plastics could make them. More machines.

About this time Duncan Bergeron joined the company's plastics department. He designed a machine that would drill a hole in the knobs, next thread the metal insert and drill a hole in the face of special knobs. This machine saved the work of three people.

By the time Tek was making our own CRTs and was sending replacement CRTs to our customers. Slight problem - the new CRT did not survive the trip. CRT then asked if we could fabricate shipping containers for the instruments. They were time consuming to make. They then asked the plastics department if we could make a plastic shipping container for the instruments. It was decided that expanded dyalite beads was the material of choice for the shipping container

We looked at buying a machine but we went to the machine shop and they said they could build what we needed for about one-third the price of a purchased one. Ray Auel was the chief mold and part designer for this machine. To expand the plastic beads to make the parts required steam. So facilities had to build a steam generator on the roof of building 19. It was placed on the roof for safety reasons.

In the mid-west there were hundreds of acres devoted to raising "industrial" grade popcorn that was not for human consumption. This popcorn was used for shipping delicate parts, including electronic instruments. Tek warehouse had huge canvas bags filled with this popcorn for shipping out instruments. One day a lady opened a

TekWeek 40 Years Ago

condensed by Gary Hoselton

Tek Grows! * 1974 was a summer for labor strikes, slowing and complicating a number of Tek construction projects locally and around the nation. A strike at the Kaiser Foundation Health Plan reduced service to emergencies only, and Kaiser refused to pay for care elsewhere.

News in the Tek world! * No more free coffee in cafeterias, now 10¢ per cup, lots of grousing; intent is to recover $200,000 cost of coffee per year. * Tek receives its own ZIP code, 97077, in place of the Beaverton 97005 code. * Most buildings in the Tek Industrial Park lost power for a half hour mid-morning when an oil pipeline failed in a PGE portable transformer at SW 141st Street. PGE emergency crews were back several weeks later when an underground 12,500 volt cable to Assembly West (47) failed, sending 400 series portables and 7000 series instrument workers home for twelve hours, made worse by it being the last week of the quarter and some were working overtime. A few weeks later, a new trench was dug and new primary plus alternate feeds were installed from the Utilities (22) building to the Assembly buildings (39 & 47) * A frequently hospitalized bright 11 year old boy with leukemia was building an oscilloscope, needing only a CRT to complete it, and had no means to acquire one. The University of Kansas Medical Center contacted Jim Gray, PST at the Tek Kansas City Service Center, who, in turn, passed request to Ed Srebnik (CRT Manufacturing manager). Ed sent one and Vern Isaac (Storage CRT Production) sent one. The hospital reported the boy was delighted to receive them, started to wire one into his instrument, but then lost his battle with the leukemia. * National Semiconductor's calculator PC board facility at Mountain View CA was completely destroyed by fire. A Tek 465 portable with cover installed was found in the smoldering ruins and taken to the Tek service center, plugged in, and it performed within specs! * Phyllis Fillmore was promoted to manager of U.S. National Bank's Electronic Park branch, replacing Gary Patterson who transferred to the head office in Portland. * At the Annual Meeting, President Earl Wantland said that the FY began optimistically in June, 1973, despite concerns over slowing of the growth rate, creeping inflation, availability of power, the possibility of increased federal taxes on companies engaged in international business, and the threat of wage and price controls. Then came the eruption in the Middle East and the oil embargo. This set off a wave of inflation and higher prices for manufacturing materials, plastics and oil. Shortages resulted, along with a worldwide demand for food and materials. Earl said Tek remains optimistic about the future. * Tek reported sales for the 1974 spring quarter of $73M, up 30% from last year, earnings $5.7M or 66¢/sh, unfilled orders of $81M, and 13,536 U.S. employees, up 15% from last year, which includes 1,150 field people, plus 3,000 employees outside the U.S.

bag of popcorn and out came a very large angry rat. She took one look at the rat and out the door she went straight to Howard's desk. She told him her story and said she would never go back in the warehouse again. Howard told her to take the rest of the day off and come back in the morning and Tek would find her a new job.

Howard ended up in the plastics engineering department and told them this story and asked if there wasn't something that was plastic that could replace the popcorn.

One of the engineers, Steve Vilko, took this as a mandate that was not to be ignored. So every spare moment that Steve had he was trying different ideas. He looked at the expanded beads and asked if they could be extruded. I called the company and they said they had such a material and they would send Tek a 55 gallon drum of material. Bingo! It worked and Tektronix plastic popcorn was born. The product was patented by Tektronix. Tek was soon getting hundreds of calls from other companies wanting to buy the plastic popcorn. Howard said we are an electronics company not a supplier of packaging material.

Tek was in the process of redesigning its line of probes. The new probe needed a connector cable that had a center conductor wire that was the size of a human hair. Engineering sent a drawing of the cable to a California company to make the desired cable. The company sent back a 50 foot sample. It worked perfectly so Lang Hedrick ordered 500 feet more. The company refused the order and said that there was no way that they would make the cable. Several phone calls between the company presidents later, they still refused to make the cable. What to do? Marketing had already started advertising the new probes. So once again they turned to plastics to make the cable. The size of the extrusion machine needed to make cable did not exist. So I called DuPont for plans to build an extrusion machine. With this information we set out to build our own machine. When we turned on the new machine and put some plastic material in the barrel it froze-up solid. A little redesign and we were in business. The cable had to have a flexible metal shield so we converted a shoelace making machine to solve the problem.

Paul Bennett was in charge of accessory cable assembly department. He could not get the proper size wire coated the proper color stripes so we set up a machine to coat the proper wire size and then built a machine to paint the proper striping. We then built the connector wire cable for Howard's in-house organ.

While all this was going on, Bill Tescher was putting together a mold making department and a shop to make all of the jigs and fixtures that our assembly department needed to make the assembled part. The instrument assemble division did not want to do any work on a part, they wanted to pick the part up and install it, so we did all of the pre-assembly for the plastic parts.

Cal Smith was made manager of the plastics department. It did not take him long to find out many of our quality problems came from the molded parts not holding the proper dimensions. So he and I put together a proposal to have all of our old style machines replaced with all brand new machines that could mold the parts to meet all quality requirements.

When engineering finished designing and building a new instrument, marketing took over the new instrument and decided how many they could sell and what day they wanted to start shipping the instruments.

When plastics received the drawings for the plastic parts needed for the new instrument, several things took place. First the mold design people looked at the part and how long it would take them to design and mold to make the part. Second, the mold maker would decide how long it would take to make and build the mold. The molding department would decide how long it would take to mold the required parts. Fourth step, the assembly manager would give the amount of time to assemble the final part if needed.

We then added all of the estimated hours to see if we could meet the needed ship date. Many times we were unable to make the ship date, so we would go see the engineering mold shop and ask if we could use their molds to make the needed part so

that we could meet the required ship date.

Tektronix wanted to design and build its own hard copy machine that was compatible to our own instruments. The biggest problem in designing the machine was to get around all the patents that Xerox already had for their own copy machines.

The machine that Tek designed worked great except that the characters did not stick to the paper. To get around a Xerox patent, Tek developed a heat sensitive ink. They then made a "hot plate", and passed the printed paper over the hot plate to set the image.

This required a high heat resistant plastic belt to transport the paper. We developed a silicon plastic belt that also had to be electrically conductive. So we mixed a conductive carbon material into the mixture when mixing the material. Then molded the "belt" but we could not have a witness line where the mold came together so we turned the belt inside-out and eliminated the problem. This belt could not stretch or change shape when it passed over the heated plate because it would distort the image to be printed.

Tektronix was growing and it needed the space that plastics occupied. Tek rented a building in Vancouver, Washington and moved the plastics department into the rented space.

(to be continued Feb 2015)

This part of **Tek History** (from the historical society) was stated as well as I've seen...

The 1980s and 1990s proved to be decades of decline for Tektronix. Increasing worldwide competition from other electronics companies shrank its profits. To cope, Tektronix downsized, cutting half its personnel between 1985 and 1995. The company's influence on regional economies, however, continued. Layoffs released a well-educated workforce into the community. As Tektronix struggled, some engineers grew frustrated that their research did not result in products and left to start their own companies. Tektronix more directly fostered this entrepreneurial spirit with the Tektronix Development Corporation (TDC). As a venture-capital subsidiary, TDC helped new business ventures develop and commercialize products that were sometimes based on technology Tektronix had created. Fur-

Death Notices August, September, October 2014

We are no longer able to get death notices or length of service information from the Tektronix data base.

We would appreciate any assistance retirees or members of their family can provide us. We have posted here the information we found in obituaries, newspapers or from family members or friends who have notified us. In order to ensure accuracy in our reporting we need: the name spelled out, date of birth and date of death. Also, we like to include their length of service at Tektronix when possible. To ensure accuracy in our reporting please leave your contact information – name, email, and/or phone number in case we have any questions.

The newsletter staff is in the office on Wednesday from 10:00 a.m. to 3:00 p.m. each week. You may call us on Wednesdays or leave a voicemail any time at 503-627-4056.

Or you may send an email to:
tek-retirees@tektronix.com

Elmer Alwin Bannick — d. 12/19/2012
at Tek 17 years; retired August 1982
Warren Burt Barnes Jr. — d. 10/04/2014
Glenn Duane Barth — d. 08/24/2014
at Tek 28 years; retired Jan 1984
Garve Austin Beckham —
d. 08/08/2014; at Tek 29 years
Jessie Lee Bollinger — d. 09/05/2014
at Tek 26 years; retired May 1983
Donald Mitchell Brisco —
d. 05/28/2014; at Tek 15 years
Harold Edward "Hank" Bullock —
d. 08/11/2014; at Tek 25 years
Karl John Clark — d. 09/21/2014
At Tek more than 10 years
Dora Pauline Cook — d. 07/24/2014
Kenneth Raymond Davenport —
d. 08/17/2014; at Tek 22 years
John G. David — d. 09/12/2014
David Craig Frazel — d. 08/15/2014
Kenneth William Hawken —
d. 10/08/2014; at Tek 29 yrs to Jun '96
Douglas (Doug) Hepburn —
d. 04/30/2014; at Tek 20 years
Max B. Hiatt — d. 08/18/2014
at Tek 28 years; retired May 1983
George F. Knickrehm — d. 09/20/2014
at Tek 22 years; retired Jan '94
Glenn Lauinger — d. 09/22/2014
Donald D. Long — d. 01/16/2013
at Tek 27 years; retired Apr 1992
Patsy Moore — d. 08/20/2014
Loren Nutter — d. 08/11/2014
Peggy "Hazel" Parkhill (Charlberg)
— d. 05/22/2014; at Tek 15 years
Joyce Paula Agnes Theresa Roucka
— d. 05/29/2014
Theodor John Schiel — d. 09/23/2014
Cleo H. (Phelps) Schneider —
d. 09/09/2014; at Tek 13 years
Marianne Kay Shults — d. 09/05/2014
Marvin Paul Stiner — d. 08/11/2014
Mildred E. Sweet — d. Dec 2014
at Tek 12 years; retired June 1988
Dennis Bruce Thomas — d. 08/29/2014
At Tek 25 years; retired in 2006
Wilber Sheldon Wridge —
d. 07/25/2014
Francis Yeager Jr. — d.09/08/2014
Eugene Homer Zirschky —
d. 08/29/2014; at Tek 32 years

RETIREE BENEFIT INFORMATION & ADDRESS CHANGE PROCEEDURE

Retiree Medical and/or Life Insurance

Anyone who is a past employee with Retiree Medical and/or Life Insurance will need to request information or make changes in writing to A & I. You must include your signature and Social Security number.

Tektronix Post Employment Services
A & I Benefit Plan Administrators, Inc.
1220 SW Morrison St., Suite 300
Portland, OR 97205-2222
Toll Free: 1-800-778-7956
Fax: 503-228-0149

401k Benefit

Anyone who has a 401k benefit must contact Fidelity for information or to change their address directly with them at:

1-800-835-5092

Cash Balance Plan

The Cash Balance Plan has been transferred to Danaher Pension Plan Processing Center with Hewitt. Questions or changes should be directed to:

1-800-580-7526

Tektronix Retiree Volunteer Program

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ther, as a part of its downsizing plan, Tektronix divested whole business units; those groups frequently continued as independent Silicon Forest companies. According to Urban Studies Professor Heike Mayer, forty-eight companies spun from Tektronix between 1980 and 2000.

sent by Dave Weathers

TRVP News

by Louis Sowa

We have been working with the First Technology Credit Union for their possible sponsorship of another luncheon. They may only partially sponsor meaning providing a space and some subsidy for food. If this should work out it will probably be the last half of March. Assuming success there will be details in the February Newsletter. The Credit Union has sponsored two luncheons over the past few years.

Editorial

by Gordon Long

The following has a good display and discussion about Global warming:
http://earthobservatory.nasa.gov/IOTD/view.php?id=84499&src=eoa-iotd

We recently received, at home, a scam IRS call. It was from Washington, DC but showed an "unknown" on the caller ID. A woman on the line was very pleasant to my wife — and passed on an 800 – number to call. When she asked me I was able to state that the IRS never calls! Beware.

The Plastics Dept. history as well as the piece by Dave Weathers are quite interesting.

Please enjoy your coming holidays: Thanksgiving and Christmas!!

See the on-line web site for two extra pages: the early Engineering team and a cartoon.

Tektronix Retiree Volunteer Program
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Beaverton, OR 97077 - 0001

Quarterly Quote: The president is just like any other man: he puts his pants on one leg at a time. *anon.*

CALENDAR

Marconi's Cronies

Meet the 2nd Wed of each month
(except July and August)
12:00 p.m.
Tom's Restaurant
3871 SE Division Street
Portland, OR
Details: Jack Riley: 503-235-5267

Previous Tek-Employees Luncheon

11:30 a.m. 2nd Monday monthly
Peppermill Restaurant
17455 SW Farmington Road #26B
(Corner of Farmington
& Kinnaman Rd)
Aloha, OR 97007
Details: Annetta Spickelmier
503-649-2491

Redmond Breakfasts

8:00 a.m. 1st Monday monthly
Shari's Restaurant; Redmond, OR
1565 SW Odem Medo Way
Spouses welcome
Details: Nick Hughes 541-548-1201

TERAC

6:00 p. m.
Round Table — Beaverton
Weekly on Friday

CRT Luncheons

3rd Tuesday in Mar, May & Nov
@ 11:30 am
Beaverton Izzy's
11900 SW Broadway
Beaverton Town Center
Details: Jack Neff: 503-554-7440
1301 E Fulton St, Apt # 233

(no longer meeting — ed.)

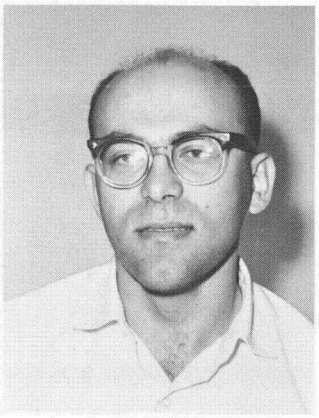
READ YOUR TEK-RETIREE NEWSLETTER ONLINE

Would you like to help save postage and read your Tek-Retiree Newsletter on our webpage? Send your name, address, phone number and email address to: **mlscott@easystreet.net**

We will send you a notice when the newsletter is posted each quarter. If your email is changed or rejected for any reason you will receive one phone call to request an update. If you don't respond we will return your newsletter to the US mail list. To preview the web page and previous issues of the newsletter go to: **www.tekretirees.org**

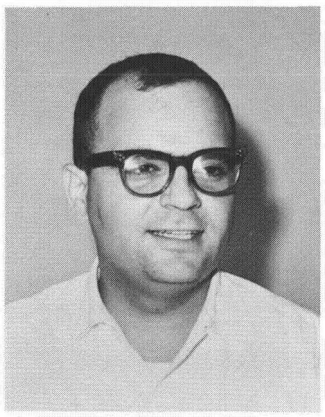
Please send questions, information or correspondence not involving the newsletter online to TVRP at **tek-retirees@tektronix.com**

"While I can explain the meaning of life, I don't dare try to explain how the Medicare system works."



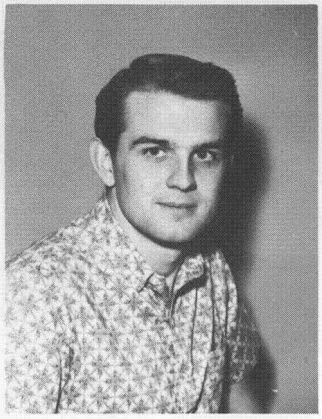
Engelson, Morris

Weiss, Lawrence



Frisch, Arnold

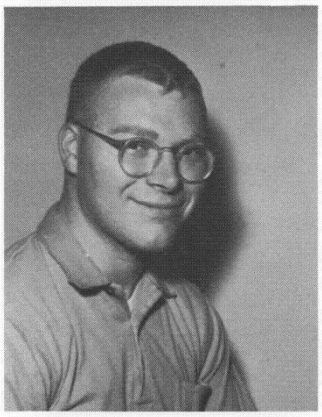
Long, Gordon



Kauffman, Gene

Lockwood, Larry

DeLano, Dan



Gault, Bob

Garrett, Len

Steve Morton

To compliment the recent article on Spectrum Analysers, most of these photos are the 3 men from Pentrix. The remainder make up the first SA eng. group at the Sunset Location – circa. 1966.

(as best I can recall. Gordon Long, TRN editor.)