TEK RETIREE NEWS
ExTek
Tektronix Retiree Volunteer Program
TRVP
Web Page: www.TekRetirees.com A Newsletter for and by Tek Retirees February 2020

State of TRVP

By Pete Nelson

Paper Newsletter: In the November issue of the newsletter, we appealed for donations to continue printing of the newsletter. The cost of the November issue was around $2,000 in printing and postage. The response was not adequate, so all donations were returned to donors. We will continue publishing the newsletter on the Web. Our web site is paid through August 2020, at which time we will request funding from Tektronix to continue newsletter distribution by email /web site. The cost of a website for email distribution is estimated to be less than $250 per year.

Editor / Reporter: We are in need of a reporter, or an Editor. A reporter would be responsible for creating a single or multiple articles for publication. Your memories of Tektronix while here... Did working at Tek experience help in later life?... How did Tektronix affect your life?...

Yes, we are looking for a replacement for Bill Gellatly. Bill brought his positive-can do attitude to the Editor position for most of three years. He tried to convince Tektronix to fund the paper for one more year. In addition to supporting Tek Retirees, Bill is extremely active with the Benton county Habitat for Humanity. He is active with Habitat for Humanity from clearing land for new housing to being on the county board. This year, Bills wife asked him to help in the release of a book she was writing. We will miss Bill, but understand his wife and local community come first. Thanks Bill for all your support.

Needs: What we need now is content, which is why we requested reporters. Tektronix continues to provide workspace, computers and Printers but that may change. We need to re-establish a connection with Tektronix / Fortive management since Luanne Shiller, our contact, left in the last Fortive downsizing.

Technical Education at Tektronix

John Stoops

Tektronix was supportive of its employees furthering their education. Tek had its own internal set of classes that taught employees everything from soldering to machining, including electronic circuitry & communication theory. Classes taught by Tek employees were the backbone of TEP (Tek Educational Program). Tek also had tuition reimbursement for many of the local schools. Much of the knowledge needed to work as an engineer at Tek was not directly available from the local universities. So Tek recruited many of its own engineers to share their hard won knowledge by teaching classes specific to their expertise. One such class was AFTR – Amplifier Frequency and Transient Response. This class was created and first taught by Carl Batjes in 1968. Carl recruited many of his colleagues to offer guest lectures. Guest lecturers included Thor Halen, John Addis, Wink Gross, Ian Getreu, Al Hollister, Einer Traa, & Bob Nordstrom.

Some of the TEP instructors included Harry Stewart, Nelson Hibbs, John Shepard, Len Bell, and Bob Beville teaching topics such as circuit analysis, Thevinin's theorem, tubes and transistors, Boolean algebra & logic design.

AFTR quickly became a "must take" course for all new engineers at Tek. Many people took it several times – both as a "refresher" and because the course continued to evolve with new material being added. Carl taught it for several years, eventually "passing the torch" to Wayne Kelso, and then to Bruce Hoffer. The material in the course was definitely graduate school level and unavailable anywhere else.

In the digital world, Don Kirkpatrick offered a course on digital design that offered unique tech-

niques on asynchronous design, also unavailable as a class outside of Tektronix.

Fred Weiss taught a class on A/D converters & DACs. Tom Leatherwood taught a class on the Motorola 6800 using the in-house "board bucket" as a hardware platform.

The PC revolution created a demand for programming language classes and these were readily available from the local community colleges. In addition, there were companies that offered to come to your location and teach course on specific topics, e.g. Grounding and Shielding, ISO9000 compliance, etc. These and many offerings by Portland Community College contributed to the eventual demise of TEP.

In July 1985, Pat Quinn initiated SYMPOSIUM on ANALOG IC Design Simulation Tools (SAIDST).

Presenters at SAIDST I included;

Ernie McRenolds - Today's SPICE performance;

Jim Kimball - Why Use TSPICE;

Grace Tsang – SCALX;

Brian Biehl – Verifying the Correctness of an IC Layout;

Wink Gross – 2400 Chip Experience;

John Addis - M377 MegAmp Experience;

Stew Taylor - M300 Double-Layer Metal Experience;

Jack Hurt – Simulating Tomorrow's IC.

There were five SAIDST Symposiums, the final on June 1, 1988. Tek sold its IC and Hybrids circuits divisions (bldg., equipment, intellectual property and people to MAXIM 1994).

Tek in-house Tools

As might be inferred from the SAIDST presentations, Tektronix developed its own set of in-house tools,

including its own version of SPICE, an analog simulation tool. This was known as TekSpice, also referred to as TSPICE. Initially TekSpice functioned as a text net list. Each circuit element was manually typed in with the first letter of the element name identifying what type it was. The element name was followed by the nodes it was connected to, and then the component's value; e.g. R35 1 8 1K. This later evolved into a graphical user interface that facilitated schematic capture. This greatly improved troubleshooting failed simulations. The simulations ran on a Cyber mainframe computer. This was before personal computers and users accessed the program from terminals. Len Carter created a program called "SCRIBE" for data entry. This was before the existence of word processors.

A frequently encountered problem was the simulation would not converge. Of course, Tek had an in-house expert for this problem - Ernie McReynolds.

In addition to the circuit simulation program, Tek had a need for modeling of its "in-house" processes. Tek's manuals included schematics with a theory of operation. Ian Getreu was asked to contribute a description of transistor computer models for one of the manuals. The description was so lucid and informative it grew into a separately published book, which became an industry standard: "Modeling the Bipolar Transistor" (still available from Amazon).

Tek maintained an integrated circuit modeling group that documented its many processes and provided simulation models for each process. The bipolar processes included SH1 (SuperHigh 1), SH2, SH3, SHPI

Chuck Saxe formed a group ADG (Advanced Design Group) to provide state-of-the-art design tools for Tektronix. The group included Dave McKinney, Steve Sullivan, Tim Sauerwine, Paul Gerlach, George Hadadd, & Craig Overhage. Tim Sauerwine developed a digital design tool, AMBER, well before VHDL and Verilog. Bob Bluhm recalled "…LOVED the tool…Amber was light years ahead of its time and a beautiful tool." "…it did some things that the tools even years later couldn't. Recursion, Clocking on both edges." Steve Harris, Kim Overhage and Craig Overhage used AMBER to design the TBC (Time Base Controller) for Eve (TDS640). Bob used AMBER to design the TBC for Elvis (TDS680).

Tek took advantage of available commercial simulation software from companies like Cadence. Tek also needed to make use of semiconductor foundries after selling its IC facilities. For a few years, Tek was able to use Maxim as a supplier, but eventually relied on IBM for high-speed analog capability. For digital designs, TSMC was a frequent choice. Of course, Tek relied on the foundry to provide device models for simulation.

Newberg Air Force Base Support

Newburg Air Force Base was the site of a Semi-Automatic Ground Environment (SAGE) station. I called on the PMEL, Precision Measurement Equipment Laboratory, that supported the calibration and repair of anything of a metrology nature, weights, standards and measures stuff. That extended to all the aeronautical instruments and radios of aircraft. While the sargent and I were discussing scopes and calibration issues, I noticed the activity of a technician at his workbench: he sawed off a length of a broom handle. He drilled a hole in one end, drove a nail in it and sharpened the tip. A hole was drilled in the other end; a BNC cable end was snipped off and mounted into that hole. He wrapped all this with black electrical tape. I am not making this up! I finally had to ask, "Sarge, what is that E4 doing?" Sarge explained: they were trying to order an extra Tek probe from Base Supply. (Remember an episode of M*A*S*H? Season two. Trapper and Hawkeye wanted to treat a patient but getting blood results from Tokyo would take too long. They wanted their own incubator. A supply officer told them they weren't allowed one-it was not on the MASH BEL, Basic Equipment List.)… The BEL of this PME-lab did not allow an extra probe so they decided to fabricate a 'defective' one to turn in for a replacement. That was allowed. Fortunately, I had probes in my brief case, and gave them some. I don't know if they still turned in the 'defective' one.

Another issue the lab was having was about ordering matched amplifier vacuum tubes from Base Supply. They ordered the Tek part number, expecting a package containing two tubes. No. One part number. Base Supply shipped ONE tube! "OK, let's order two of the part numbers. So what do we get? Two tubes separated, loose, not the matched pair package!" I could not help this right away, but did notify a Beaverton shipping group to emphatically label the packages with something like 'Matched Pair-DO NOT SEPARATE'…

Along about this time the part-number system switched from six digits, XXX-XXX, to nine digits, XXX-XXXX-XX. The change was a boon to this lab. Sarge realized if orders were placed with Base Supply using the new format, it would not match anything Base Supply had. They then had to forward the order out to Tektronix. The lab enjoyed this for quite a while until Base Supply eventually caught on…

TRVP Then and Now

Louis Sowa

A brief history of the TRVP as I see it. A letter sent only to people who were getting retirement benefits in 1996. A second letter also included us classified as Terminated Vested, a more inclusive group. Initially there was a much larger agenda then the newsletter with direct involvement in the community.

Tek had gone through a series of layoffs damaging the Tek image in the community. I believe the main drive for Tek to support The TRVP was to improve that image. Sharon Beatty was hired for a year and I think half pay a second year to pull the organization together. Her involvement concluded there has been a long slow decline in participation. Most of us involved were not great promoters, however very dedicated. There has been dwindling participation due to death and family issues that has diminished our ACTIVE numbers. Tek has continued to decrease support for the TRVP.

We expect Tek will continue to support the website, office space, and use of office equipment. If the TRVP is to continue, long term there will need to be more involvement from retirees.

We will also be modifying the formatting.

The Original Staff:

Editor/Publisher: Newt Espe

Editorial Staff:

Dick Braniff
Peggy Jo Berg, Eve Fitzgerald
Louis Sowa
Jennie Lou Werlein

TRVP Development Team:

Warren Collier
Jess Gard
Evelyn Marsh
Dick Duggan
Harry Tanielian
Ed & Roz Srebnic

Death Notices

Avery, Donald – d12/24/20-19 @Tek 8.91 years

Bernhardt, Leonard – d12/23/2019

Chinell, Gloria Ann d7/30/2018 @Tek~18 years

Day, Sheila Elaine – d9/5/2017

Dixon, Warren E. – d11/17/2019 @Te,~25 years

Frisch, Arnold M. – d12/12/2019

Gilbert, Barrie – 1/30/2020

Griffiths, Stanley A – d1/19/2020

Hanchrow, James J. – d212/4/2019 @Tek 15.16 years

Hall, Dennis Robert – 4/6/2018

Horine Jr, Kelvin Philip —d1/16/2020

Latham, Mark A. – d4/1/2012

Nedrow, Florence – d10/15/2007

Njust, Bruce M. – d12/3/2019 @Tek 25 years

Nordling, Kenneth Emil –d12/26/2019 @Tek 24.16 years

Overhage, Craig T. – d12/10/019

Reekie, Scott F. – d1/28/2019 @Tek 24.31 years.

Todd, Robert Wheeler – d2/18/2019

Williams, Frances Christacakos –12/15/2019 @Tek 39 years

VintageTEK Hours

Friday - 10am to 6pm
Saturday - 10am to 4pm
Other times by request

Tek Retiree News B

Editor: Open
Publisher: Louis Sowa interim

TRVP Staff

John Addis • Pete Nelson •
Randy Winkel •
John Stoops • Bob Beville

Tek Retiree Newsletter is published quarterly by the Tektronix Retiree Volunteer Program. Send all correspondence to Tek Retiree News, M/S 13-400, PO Box 500, Beaverton, OR 97077
Office Telephone:

503-627-4056

Email:
tek-retirees@tektronix.com

TRVP Web Page:
www.tekretirees.com

TRVP Office Hours

Thursdays 10-3

CALENDAR

Engineering Breakfast

Wednesday 8AM Beaverton/ Hillsboro area. Lively discussion all subjects. For details contact Steven E. Rice pacemakerpete@hotmail.com

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
503-312-8825

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

Ex-Tek Radio Amateurs

Weekly on Friday
Time: 5:30 PM
Place: Round Table Pizza
10070 SW Barbur Blvd
Portland, OR 97219
Phone 503-245-2211

Your Updated Phone Numbers

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
Trust Fund: BeneSys
5331 SW McCadam
Portland OR 97239
Toll Free: 1-800-778-7956

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

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

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About this Issue

Louis Sowa

This issue features The retirement of Fred and Donna Anderson. The "Modern Homesteading" is a repeat from the May 2005 TRN.

A Machinist Road to Success

It was June 19511 had just graduated from high school. The Korean war was still going on. Mare Island Naval Shipyard in Vallejo California was offering a four year machinist course. I enjoyed working with tools having already at age 16 rebuilt the engine in my 39 Chevrolet coup. I signed up for the four year course at the shipyard. It would be four weeks of work and then the fifth week would be college classes. Mare Island was located 45 miles from. home. I was able to share the ride with others who also worked at the shipyard. The pay was ninety cents an hour.

The first few weeks we were shown the inside and outside of the machines we would use, lathes, milling machines, drill presses, grinders and electric hand tools. Our first jobs were in shop 36, this shop was used for making and repairing parts. At times we would board ships to disassemble and repair parts such as firearms. These firearms were four inches in diameter, the bullets measured 3 inches in diameter. Metal lathes, grinders and hydraulic equipment were also on board for us to use.

In 1953 the Korean War ended, us students continued our training until the four years had ended, receiving our diplomas. Shortly there was a lay off at the shipyard, the graduated students were laid off.

I was offered a job at Kaiser aircraft near Richmond, California Here we operated 2 and 3 spindle N.C. tape machines. The fixtures used to machine the parts we were working on were bolted to an angle plate ready to machine. These 12 feet tall very precise vertical and horizontal milling machines were about 30 feet long. The operators job was to charge the tools and metal parts to be machined.

In a short time I was hired back to Mare Island, In 1968 having worked at Mare Island for 15 years we moved our family of 3 children to Gaston, Oregon, just south of Forest Grove.

I sold my commercial salmon fishing troller which was anchored at the Bodega Bay Harbor for nine years. The largest salmon I caught weighed 60 lbs. My son navigated the boat at age 9 and onward, while I bated the hooks and pulled the fish in from the rear of the boat. Our farm in Gaston consisted of a horse for each girl 2 cows, grain fields and 20 hives of bees. We extracted the honey and the Tektronix employees bought it.

In 1983 word spread that a lay off at Tektronix could come soon. We than sold our farm and moved to a 160 acre old homestead near Enterprise, Oregon.

Modern Homesteading

By: Mrs. Fred L. Anderson, Jr.

It was a Sunday in February 1980. The children were gone from the nest, creating an almost unbearable stillness at our farmhouse. Thoughts of moving on seemed attractive. Yes, tomorrow I'd stop by the United Farm Agency and pick up a real estate catalog.

Five months later we were standing on an old abandoned homestead of 1888 in the northeast mountains of Oregon. Many hours of dedicated labor would be needed

to make this land come alive again. The land consisted of 80 acres of timber and 80 acres of pastureland. The old shallow hand dug well seemed only fit for animal use. Power lines ended six and one half miles away.

In 1984 we left our farm and city jobs to try and restore this old homestead. We moved our belongings into a 40' x 22feet pole building we had built on our vacations. Our living area at one end was 12 feet x 22 feet with a shallow loft above with room enough for a bed and dresser. A used 12inch x 22inch wood burning trash burner was used for cooking and heating. Rainwater was collected in buckets placed under down spouts and then strained through a two-gallon metal milk strainer fitted with a replaceable cotton filter. The strained water was then poured into a 50 gallon heavy black plastic barrel. This barrel had an opening on the top of 16inches for

easy access and cleaning. A sturdy screw on lid fit tightly. Rainwater collected from metal roofs was not used for drinking or washing green leafy vegetables. Water collected from well-settled snow can equal nearly 3/4 of a gallon of water from 1 gallon of snow. Perhaps almost a ton of snow has been melted during a winter here.

During the first 8 months we were able to make enough lumber from

our dead pine trees to build a 40 feet x 22 feet enclosed barn, a 20 feet by 20 feet shop and a 10 feet x 10 feet root cellar. These projects took many hours a day six days a week. We always rested on the seventh day. That first winter temperatures dropped to a low of –34 with a total of 12 feet of snowfall. Parts of every day were spent removing snow from walkways, buildings and work areas. Quickly we became very strong and healthy. Layering our clothing for warmth we were able to work outdoors each day. To keep the cows' water from freezing in their tub we placed the tub in another wood tub surrounded by straw and placed it in their barn. Mounting old snow skis on a wood wagon we built, helped to pull buckets of water from the old hand dug well 700 feet away. Caring for cows at this 5,000 feet elevation during winters is difficult. We noticed Red, an 8- month pregnant cow trying to deliver her calf early and coming feet first. Having no phone and two feet of new snow on the road Fred anchored a piece of plywood on top of the 3 point hitch on the tractor for the veterinarian to sit on for the two miles in from the highway, while I found a bright red knee high sock and stretched it over the spotlight on the tractor for a taillight. Thanks to the kindhearted bovine doctor rushing to the scene little Annie survived weighing in at only 26 lbs. The kind doctor declined his perch on the plywood, gave his vehicle all the power it had and raced up the hill.

During the summer of 1986, we laid the foundation for a log house 43 feet x 34 feet We quickly found peeling dead lodge pole pine logs took a lot of muscle power. A flat was cut on two sides opposite each other, leaving two remaining sides to remove the bark with drawknives. We found we could only process nine logs a day. Each log became a special piece of a puzzle to be used somewhere in a house that was to be our home. Using a small chain saw worked well for cutting the mortise and tenon at each intersecting log. The floor joist and inside walls were log, creating even shrinkage throughout the structure. Fred became the chief source of power for seating the logs, except for the small chain saw. Kitchen and bathroom cabinets were created using left over tongue and groove pine flooring we had made. Allowing sometime for the structure to settle, permanent windows replaced temporary ones made of four millimeter plastic sheeting. Our electrical power for the house is supplied by batteries, which are charged by photovoltaic panels.

Going into town was difficult for the first couple of winters and because of this we rarely went. However, on these days Fred would push or ride a bicycle over packed snow for the first two miles to the highway then another four and one half miles to where our pickup was stored for the winter. Exchanging the bicycle for the pickup he'd drive the four and one half miles back to pick me up. Coming home the process was

reversed. We'd then fill my backpack with groceries and strap it on my back. The first mile home was uphill and difficult. Walking in the snow with a heavy load tested our ability to put forth much energy. Darkness came early and we dared not stop for fear of losing momentum and never again being able to gain it back.

Looking back in time we don't really seem to have any regrets of moving here. I've found it best not to contemplate what might have been had our choice been different. I do miss the sound of hot water swishing in the dishwasher and of seeing hot steam rising from under the lid on the washing machine and the clicking sound as clothes tumble and dry to a soft perfection gives one great satisfaction in a job well done.

The delight and feel of crisp white uniforms early in the morning cannot be forgotten. It's probably well to remember what Wendell Berry advises, "Be careful when you choose your hardships". Perhaps someday someone will come and replace us here never really knowing the efforts put forth in striving for perfection. Taking time now to observe these seven buildings, having made all the lumber used, I realize the conscious awareness and care only a proficient machinist by trade could achieve. How does one measure success and happiness? Can there really be happiness at the end of life's rainbow? Is happiness the free feeling of being safely tucked away on this mountaintop to work or rest as you please? The Joy of seeing cougar run free through the meadow and the songs of the coyote in the evening bring delight and enjoyment to one's self. Those who succeed must have a strong commitment to gain something special for themselves, to a way of life you believe in, and letting nothing come between you and that goal. Looking now out across the garden over the deep snow, carrots and sweet parsnips wait to be dug and enjoyed. Soon new life will appear everywhere. Red rhubarb heads appear and asparagus spears stand tall like many marching soldiers. Strawberry blossoms tell of sweet treats to come, shelves heavy with jams and sauces. Perhaps success and happiness is a combination of all of these things and they can be enjoyed by anyone who just takes the time to look for it.

You may contact us at: Mr. & Mrs. Fred L. Anderson Jr

PO Box 624

Part 2 Story by Donna

Fred's activities here on this land have been interesting. Using a chain saw with the alaska mark 3 attachment worked well for cutting all the lumber we have made. A stand for this attachment to ride along on was made out of 3 2X 6 by 20 feet long boards, plus a sturdy wood stand at each end to hold everything up and level. We'd then lift or roll a log onto two old tire jacks raised these jacks up to meet the chain saw. Parts of each tree not used for lumber were cut up into firewood. Perhaps as much as 30 cords of firewood have been cut per year. Each piece was split with a 10 lb. splitting mall before we bought a gasoline powered wood splitter. Many hours have been spent maintaining our 100 acres of trees, also trimming trees and selling logs to lumber mills.

Perhaps the 43 foot ridge bean for our log house has been ,the biggest

challenge. We cut this tall pine tree down one half mile from home, rough cut the outer layers off using a long wood plank for the chain saw to ride on as the saw trimmed it. We than jacked up each end of this long log, backed our flat bed trailer under it for an interesting ride home. After letting this beam dry for two months we raised it onto our old 1956 lawn mower roller, we had secured on the last stacked log, tied a rope around that end and pulled it across the second floor ready to be lifted again to ceiling height of 19 feet. It took about 3 years to finish building the log house. Seven buildings have been built using all the lumber we made from our trees.

To locate water we used two 20 inch copper wires bending one end 4 inches down for a handle. To locate an under ground stream of water, walk slowly over an area free of any buried pipes or debris, holding the copper wires straight out in front of you, walk slowly. You will feel the rods start moving up and down, then come to a stop. Count these bounces. Each bounce equal one foot down to the flow of water. To check this, walk over your garden hose the water running through it. The rods will bounce 4 time plus one slow bounce as it stops, always facing the way the water is running. Move the hose facing a different direction to check again. I've found that very few people have this ability to locate water. If this method works for you and it doesn't for a friend, have the friend use the rods in the same way stopped over a flow of water. You take hold of their wrist careful not to touch the rods and within a couple minutes the rods will bounce. Perhaps this has to do with how much electricity is in ones body which is produced by exertion to it point of application in a line to the moving flow of water below.

We want to encourage those of you who are retired or retiring soon to locate a place away from busy cities so you can enjoy the fresh air, nature and a simple way of living with daily exercise to maintain your strength, creating a healthy body as the last of our years come to an end.

By Fred and Donna Anderson
PO Box 624
Enterprise, OR 97828
Phone number incase you want to contact us is (541)398-1821

Missing Byline in Last Issue

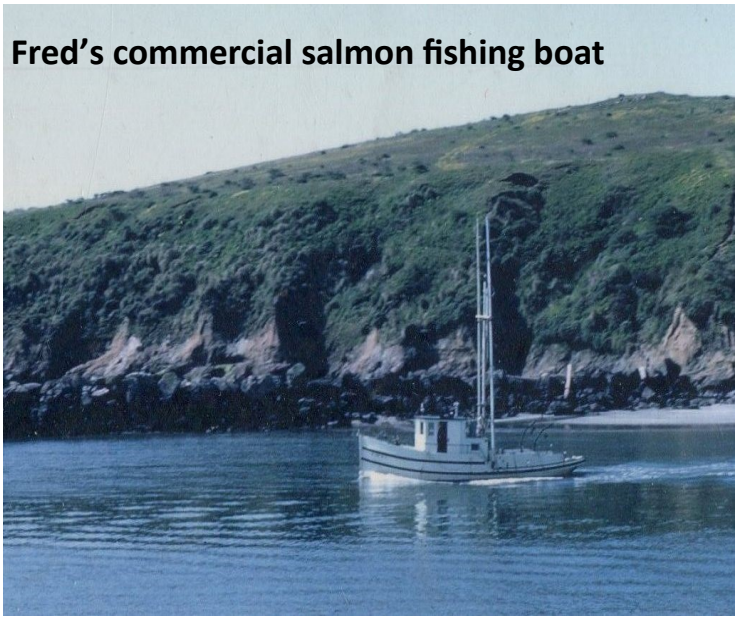
In the last issue of the TEK RETIREE NEWS, an article about a Tek Field Engineer's visit to Newburgh Air Force Base, New York, had the byline left out. Some readers did notice. The visit is a portion of a memoir, 'A Chameleon Oscilloscope Career' by Bob Beville, under the Contributed Stories tab, in website www.tekretirees.com.
(This is similar to the credits of the motion picture "Saving Private Ryan". Cheers bartender Ted Danson's name was left out.)

A Chameleon Oscilloscope Career

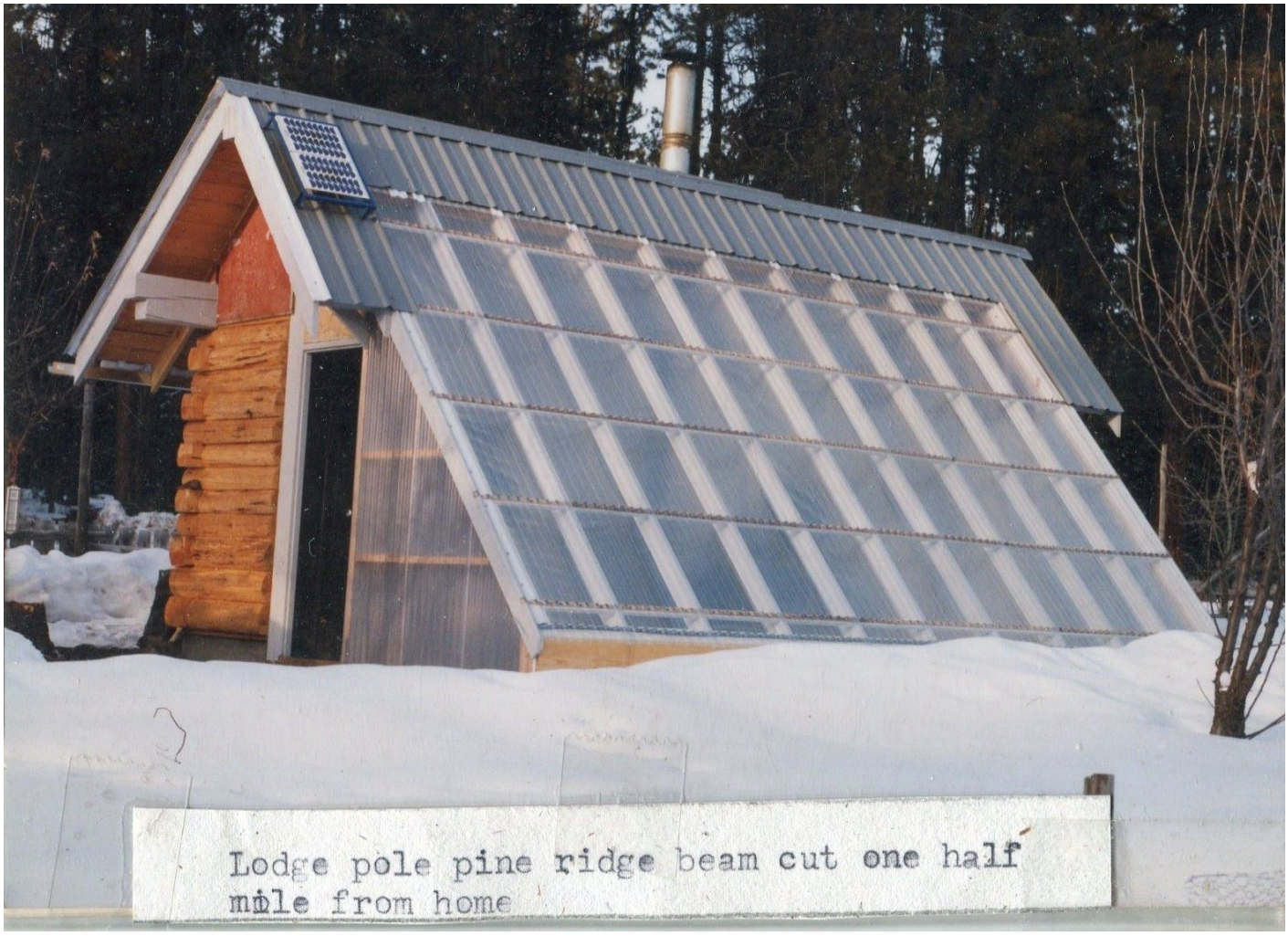
The VintageTEK Museum website has posted the Bob Beville's memoirs entitled <A CHAMELEON OSCILLOSCOPE CAREER>. It is an interesting read. Here is an excerpt…

A FBI agent phoned the office. He wanted to meet with whomever called on Griffiss Air Force Base, Rome, New York. That was me. I arranged an appointment, meeting him in the Officers Club there. Among other missions, he explained, this was a logistics base, a warehouse stocked with a variety of items and equipment ready to be shipped out to other bases. A number of 581 scopes had disappeared from a loading dock. Shown a catalog, I explained this scope was not operational without a plugin. He wanted me to be on lookout for any of them. "Sure will"… (FILE THIS FOR LATER).

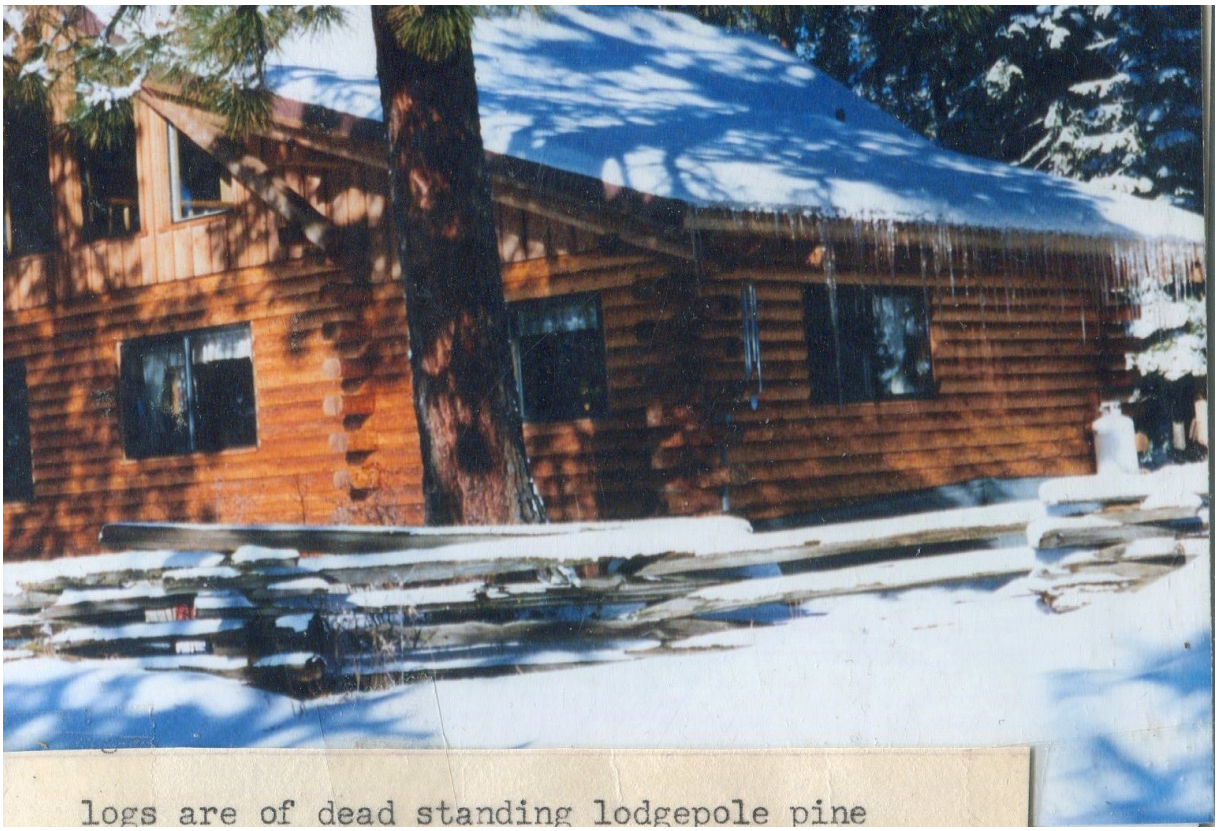
Fred's commercial salmon fishing boat



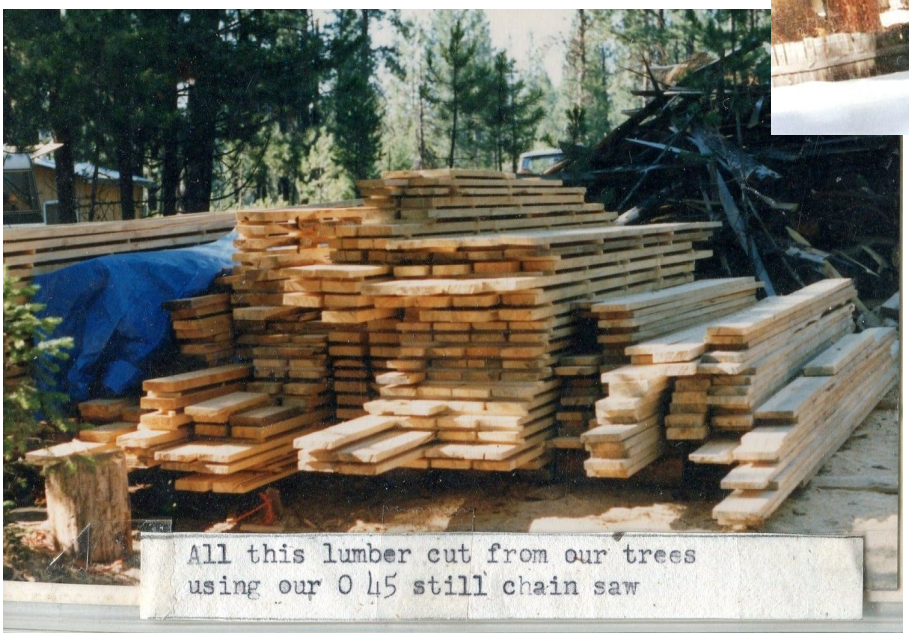
iew from our living room Homesteaders cabin 1888



Lodge pole pine ridge beam cut one half mile from home



logs are of dead standing lodgepole pine



All this lumber cut from our trees
using our O 45 still chain saw

Fred using the alaska 3
chain saw mill to make
a large upright support


Our garden vwgetables

My Life on the Dry Side

Donna Anderson, Woodland owner in Enterprise, Oregon

The chain saw seemed to scream as it slid down this log cutting a 2x8 inch board to be used on Fred's shop. We had just sold our farm on the west side of the state hoping to enjoy more sunshine and less rain on this east side.

This land has many dead lodge pole pine trees which we could use for lumber. Words cannot fully express the joy of walking through our forest among the many tall pines, fir, lodge pole and spruce trees. The squirrels running and bouncing along the forest floor planting trees as the y drop seeds from their mouths. Occasionally a surprised bear runs up a tree, telling us to hurry along.

Sitting in our living room just now as I write this, admiring the many beautiful lodge pole logs we peeled using our draw knives. Then remembering the long hand drill sinking deeply into each log and still further into the log beneath making ready for the 10-inch long spikes.

Electric power lines end six miles away.

The beauty of the tongue and groove pine kitchen cabinets matching the floor beneath is beautiful. Looking up high sits a 43-foot ridge beam that we cut from a ponderosa pine tree a half mile from home. One cannot forget cutting the tall tree down, loading it on our 8x9 flatbed trailer sideways for an interesting ride home.

Looking back in time now, we wonder at how we could have cut and milled all the logs into lumber used in these seven buildings without help. Perhaps our desire to always finish what we have started has helped us to succeed.

Fred, a skilled machinist of 30 years, could be the answer. Without his knowledge, life on this land here would be impossible.

However, there were times of stress remembering well as Fred fills my backpack with groceries, the climb up the hill in the snow with a heavy load for the first mile, but then the joy of reaching the top and then an easy walk the last mile home.

And back over west remembering well our three children, the girls loving their horses, our son busy with his studies, eager to become an engineer, Fred busy planting crops, milking a cow or two, extracting honey from his 29 hives of bees. A long trip to work each night. Up early Monday, a rush to work in busy traffic, hoping to find my favorite parking space empty, holding tightly to the hand rail as I hurry down the steps of the courthouse.

Yes, Life is different on the Dry Side.
Donna

How's your life on the dry side?

Bob Parker, Extension Forester
Baker/Grant Counties

Life is different on the Dry Side of Oregon. Woodland owners here are proud of our lifestyle. We would love to hear your story.

One contributor's story will be shared in the next issue of this publication.

Share your story by email:
bob.parker@oregonstate.edu.

Or mail to:
OSU Extension Baker County
2600 East Street
Baker City, OR 97814

You can also submit online at:
extension.oregonstate.edu/baker

We look forward to hearing from you. Please feel free to call with any questions. 541-523-6418

Death Notices

Bateman, Glenn – d1/20/2020

Cowen, Clarence "Gene" -d1/17/2020

Heintz (Fosket), Rebecca'Becky' – d2/15/2020

Heintz (Fosket), Rebecca Lou –d2/15/2020

Holmes, Katherine Jean –d1/10/2020

Jacobs, James Willis – d6/11/2019

Morris, Loeta M. – d4/21/2020 @Tek21.23 years

Moore, John Sylvester –d2/10/2020

Primmer, Delores 'Lolly' Tiffany – d2/7/2020

Rehkopt, Laurie – d3/15/2020

Robin, Neil –d4/16/2020

VintageTEK Hours

Friday - 10am to 6pm
Saturday - 10am to 4pm
Other times by request

Tek Retiree News c

Editor: Open
Publisher: Louis Sowa interim

TRVP Staff

John Addis • Pete Nelson • Randy Winkel • John Stoops • Bob Beville

Tek Retiree Newsletter is published quarterly by the Tektronix Retiree Volunteer Program. Send all correspondence to:
Tek Retiree News, M/S 13-400, PO Box 500, Beaverton, OR 97077

Office Telephone: 503-627-4056 Email: tek-retirees@tektronix.com

TRVP Web Page: www.tekretirees.com

TRVP Office Hours: Thursdays 10-3

CALENDAR

Engineering Breakfast

Wednesday 8AM Beaverton/ Hillsboro area. Lively discussion all subjects. For details contact Steven E. Rice pacemakerpete@hotmail.com

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
503-312-8825

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

Ex-Tek Radio Amateurs

Weekly on Friday
Time: 5:30 PM
Place: Round Table Pizza
10070 SW Barbur Blvd
Portland, OR 97219
Phone 503-245-2211

Tektronix – customer care center (800) 833-9200

(This is the main contact for Tek Retiree Benefits. You need this if changes are made to any of the following contacts.)

Select option 6 – Tektronix Benefits resource
Tektronix pension plan or cash Balance questions
Call AON **800-580-7526**

ADD and Life Insurance - call Alight **(800) 964**-7985
(Answered by recorder. Leave a message)

401K Plan questions – call Fidelity **(800) 835-5092**

Problems: please let TRVP know. (503) 627-4056. Last modified 4/27/20

TEK RETIREE NEWS

ExTek

Tektronix Retiree Volunteer Program TRVP

Web Page: www.TekRetirees.com A Newsletter for and by Tek Retirees August 2020

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Positive Activities

Pete Nelson

News – The news over the past 3 months is the Pandemic and how it has affected our lives. Rather than feeling incarcerated in my home, I used the time to expand my knowledge. These are the things that have occupied my time and may be of value to you.

Happiness. A news article about a free university course on happiness caught my attention. The class is given online through corseca.com. Actual course title was "Psychology and the good life" given through Yale University by Professor Laurie Santos. The first semester the course was offered at Yale, over 1200 students signed up and was most popular course in Yale's history. The online course has been given to over 2.7 million students.

The class takes about 19 hours to complete. To signup https://www.coursera.org/learn/the-science-of-well-being

Course Abstract.

Aspen Ideas Festival, June 29 2018. 58 minutes. https://www.youtube.com/watch?v=ZizdB0TgAVM

Health – With age comes a natural decline in health and increased need for drugs to mitigate the loss. However, doctors tell me that there is a negative effect of taking multiple drugs. It is called drug interaction. A doctor at St Vincent Hospital claims modifying diet can reverse dependence on drugs for cancer, diabetes, stroke and heart disease. He recommends a diet based on foods that your grandparents ate in the 1800's. Miles Hassell and his sister wrote the book "Good Food Great Medicine." For the past 4 months, I have been following their recommendations. I was tested this May, my A1C is down 0.7 and weight down 12 lbs. as compared with 7 months prior. If my name is not in the obits column, the food change is helping.

Reference: Miles Hassell MD and Mea Hassell. GoodFoodGreatMedicine.com

Kanopy – What is a pandemic, what is the history of pandemics? I needed information to make an informed decision. The Spanish flu took the life of my mother's sister when they lived in New York City and I had heard of the Black Plague. Both Washington and Multnomah County library subscribe to Kanopy service. Kanopy service is a collection of online movies, and educational videos. The educational videos are presented by Great Courses. I found a history course on "The Black Death" which presents a

time line of the disease, the social and economic impact and how each city and country dealt with the challenge. I understand that most libraries subscribe to Kanopy. To use Kanopy sign into your library and then Kanopy. You may need to call the library to get help to access.

Grateful – I count my blessings daily for the people around me. My wife is still a fun person to be around even after 39 years and I try to make sure she knows it daily. She works hard at keeping me healthy. Two of our neighbors shop weekly for our groceries.

I am anxious to hear what you, the readers of the newsletter… What are you doing during the pandemic lockdown? Write to us.

Meet Your Staff

The following bio's are of the current active staff and are in no particular order. We have some individual tasks however operate collaboratively.

Pete Nelson

Data Base

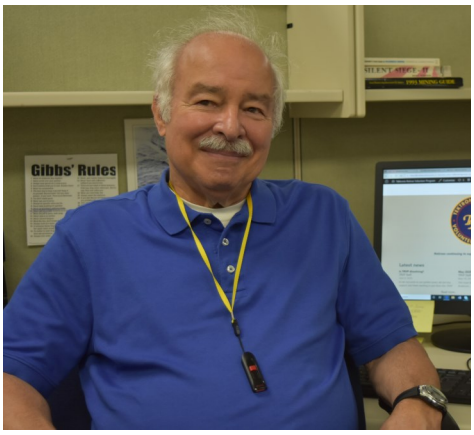
Peter is a native Oregonian born at Emanuel hospital in Portland. He graduated from Beaverton High School and then Portland State College (now a University). He majored in mathematics with minors in Applied Science and Electrical Engineering. After college, when the draft board sent a letter, he choose to join the Air Force after a recruiter promised a job and location choice. Pete was naive.

His first job was SAGE weapons controller defending the nation's capital from Fort Lee Virginia. His second job was at Melville AFS in Labrador (near Goose Bay). The task was to intercept enemy bombers as they attacked North America. With the postponement of World War III, he busied his time rescuing wayward aircraft before they crashed.

His third assignment was the Space Defense Center, Cheyenne Mountain outside Colorado Springs, Colorado as an Orbital Analyst. He found, tracked and predicted the path of orbital satellites. It was a chance to use his training at last.

Assignment four was Woomera, South Australia, Australia in the middle of the Gibber desert for two years. He was one of 36 members of an Activation Test Force responsible for bringing the Defense Support Program ground station to life in less than 730 days! The ground station was activated on time, within budget, and met all operational requirements. As of November 2010, the 40th anniversary of the first satellite launch, the program had successfully launched 23 satellites into synchronous orbit.

From the heat of the desert, the Air Force next sent Peter to chilly



Great Falls, Montana in the dead of winter (40 below). As a Missile Combat Crew Commander responsible for 'babysitting' 50 nuclear missiles, the assignment was stressful but quiet except for the night when Nixon resigned. To keep busy, he enrolled in graduate school.

The Air Force decided they had too many officers so they implemented RIF (Reduction in Force) program. He continued his education at University of Montana.

Coming back to Oregon, he worked as an Industrial Engineer setting time standards for Freightliner until an opportunity to work at Tektronix arose. While at Tektronix he created the first facilities space plan, wrote the first budgeting software on a desk top PC (Tek 4051), and a program for marketing to forecast anticipated demand for lab instruments to coordinate with manufacturing and finance. Then he retrained as a UNIX system administer to support mechanical engineers CAD/CAM in Accessories Division. Tektronix continued to downsize, and he left in 1994.

While at Tek, he worked with Washington County sheriff's department in the Disaster Management section where he created, and executed a three county disaster drill on Tek property.

He is a founding member of a church in Orenco and managed their finances for two years. That led to a consulting job at St Vincent hospital with CMSI installing UNIX systems and retiring their IBM mainframe.

A recruiter offered him a consulting job at Freightliner to write a program. His second tenure at Freightliner was for 3 years after which he retired.

Peter has four children and five grandchildren.

Interests: Computer, travel, sailing in the San Juan Islands, exploring the world, investing, walking, and maintaining relations with family and friends.

Organizations: Beaverton HS Golden Grads, Cascade Prime Timers, Trails Club of Oregon, Evergreen Investment Club (NAIC), and United Nations Association.

Bob Beville

Staff Writer

Bob graduated from the University of Florida with a BSEE degree in 1961, MSE in 1963. At Patrick Air Force Base, he was director of 55 research missions recording refractometer measurements in the missile launch corridor of the Atlantic Missile Range, Cape Canaveral, Florida. He joined Tektronix in 1963 to be a Field Engineer, then a product evaluator, design engineer, and a supplier quality engineer. He was on the design teams of the 821 Trigger Recognizer, 850 Counter/Timer, 465 Mod 719A Transition Counter, FG5010 Function Generator, 7D11 Digital Delay Plugin, and MPTS Multi-Purpose Test Stations. In Beaverton, he began part time teaching a class in Boolean Algebra and Logic Design in the TEP Tek Education Program. Later, classes in understanding the GPIB General Purpose Interface Bus. At a satellite campus of Oregon Institute of Technology, Bob taught Boolean Algebra and Sequential State Machine Design as an adjunct instructor, part time, for 11 years. A MBA in 1983, UofP. With each Tektronix Annual Report, he formulated and posted Tek's Z-Score, the metric derived by Dr. Altman of a company's propensity to go bankrupt. The "GLOWWORM BULLETINS", posted on tek.rumor, were his intelligence-style analyses of operatives' sightings and activities of Tek executives and Board Members. Bob's book collection is non-fiction accounts of intelligence, counter intelligence, espionage, sabotage, cryptography, code breaking and submarine war patrols. During the Cold War, Bob feared an EMP explosion would ruin all the semiconductor junctions, so he collected hundreds of slide rules for recovery.

Retirement was in 1999. 35 years, Bulova watch; treated to a retirement lunch at the Helvetia Tavern. He began volunteering on the staff of the Tek Retiree News in August 2017 and wrote his career memoirs. He spends leisure time volunteering on Oregon Archaeology Society archaeology excavations, volunteering at the Fort Vancouver Archaeology Lab, studying wilderness survival and bushcraft techniques, taking PCC Criminal Justice courses and metal detecting. He reads Patricia Cornwell, Kathy Reichs and the Jon Jefferson/Dr. Bill Bass Body Farm novels. He has planned to donate his body to the *Body Farm* for Forensic Science. *Mortui Prosumus Vitae*.

John Stoops

Staff Writer

John was born in Greenville, S.C. in 1947. He graduated from Oklahoma State University in 1970 with a BSEE. He went to work for Bell Labs in Whippany N.J. working on the Safeguard Missile Defense System. Bell Labs sent him to Stanford for his MSEE. John met his future wife, Marie, at Stanford. Marie, a nurse at Stanford hospital, cared for research patients including the first heart transplants in the US. After John had worked for 4 years at the Labs, Bell committed to leaving defense work. John saw an ad for engineers from Tektronix. He applied to Tek and in 1974 was hired into HFCD (High Frequency Component Development). John designed and developed the test and trim fixture for Tek's NOVAR attenuator. This was used in the SC504. The 1Megohm attenuator

was implemented on a laser trimmed hybrid substrate. The name NOVAR was an abbreviation for "no variables". The attenuator had laser trimmed the resistors and compensating capacitors. This saved the expense of adjusting the attenuators during manufacturing, and removed the possibility of the attenuator being "misadjusted" by well-meaning but unknowing technicians. It also provided tightly spec'd input R and input C, as well as tightly spec'd divide ratios and "hook-free" compensated attenuators.

He transferred into PID (Portable Instrument Division) to work on the Bridge project, which combined an analog scope with a logic analyzer.

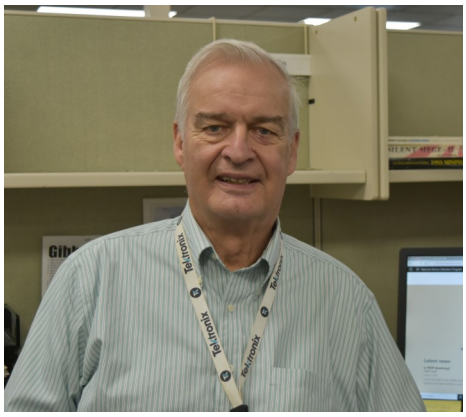
John was a hardware project lead for a number of high performance scopes including the 11300A, TDS684, MSO/DPO7000, P6717A, and the DPO70000SX. John had eight patents at Tek.

John retired from Tek in 2017. His interest include music (country, folk, & blues), reading, Scrabble, Trivial Pursuit, computers, forensics, and Christian apologetics. He is easily recognized by his colorful Hawaiian shirts.

Louis Sowa

Newsletter Publisher

Louis grew up on a farm in the Willamette Valley. In 1966 started at IBM in San Jose CA as a Systems Tech on the 360/20 Mainframe. In 1967 he was one of the first to transfer to the new IBM facility in Boca Raton FL, became a Manager of Systems Techs, He



wanted to stay in a technical position and became a Test Engineer, He then joined the Custom Process Control System Design team. In 1973 moved Back to Oregon to care for father and continue as a single parent to daughters after accepting a job at Tektronix as 3260 System Tech. Louis was on the Muppets development Team, Cats System Software Design, team in LID. Finally a Custom Test System Design Engineer. After Tek Louis worked at Hewlett/ Packard in Automated Manufacturing design and support.

Volunteers with TRVP since 1997, and volunteers at Antique Powerland in Brooks, Oregon, FM Radio Station Engineering, and a Food Pantry.

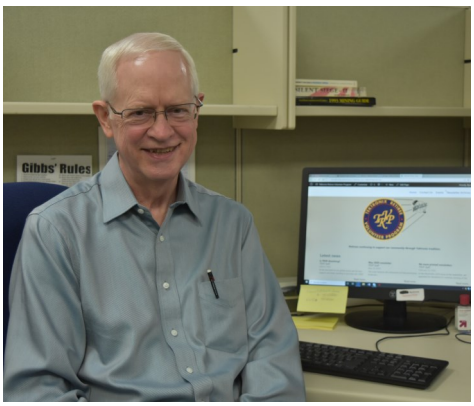
Byron Lunz

Webmaster

Byron was born in Sydney, OH in 1948. He graduated from the University of Cincinnati in 1971 with a BSEE degree.

Byron was hired as a Field Engineer in 1971, working out of the Dayton, OH field office. He won several sales awards and contests, and in 1976 became his district's Digital Specialist (logic analyzers) and later MDP Specialist (Microprocessor Development Products).
In 1980, he accepted a job in marketing in the MDP business unit at the Walker Road facility. Byron left Tek in 1990. He also worked for Microtek International (previously Microcosm, an Intel spin-off), Flir Systems and Intel.

In 1996, Byron started his own successful online business, Data-Back Systems LLC. In 2020, he became a TRVP volunteer, rebuilding and hosting our website and distributing our quarterly email newsletter. His interests include Christian apologetics, computers & email, 4 grandkids, and serving as senior sound tech at his church.



John Addis

Obituary Editor

John Addis was born in Plainfield, NJ, and grew up in Monmouth County, NJ. One of his neighbors was three years older and interested in electronics. It was there that he became interested in, then designed, built, and tested tape recorder and audio amplifier circuits.

The family moved to Daytona Beach, FL, when John was barely

in the 9th grade. He was admitted to the Massachusetts Institute of Technology where he received his bachelor's degree in electrical engineering. He applied for work at Hewlett Packard in Loveland, CO, at Tektronix, at Hewlett Packard in Palo Alto, CA, and received employment offers from all three.
At Tektronix, he designed several products, including the 1A7, 10A2A, 7A11, 485 vertical preamplifier, the 7A29, and the ground-breaking integrated circuit at the core of all five original 11K series plugins, the M377.
Along the way he published three articles in industry magazines, a chapter in *Analog Circuit Design, Art, Science and Personalities,* and gathered 15 patents, a few of them actually good. A career spanned designs using vacuum tubes, transistors, hybrids, and ultimately integrated circuits.
He probably gained broader fame among most Tektronix employees for his address at the Tektronix Shareholders meeting in 1988 than for his circuit designs. Basically, he told the shareholders and the Board of Directors, that management, after granting Golden Parachutes and lucrative bonuses to executives, had lost half a billion dollars and split the once iconic, egalitarian, profit-sharing company into "them" and "us". He was actually applauded at the meeting. The next shareholder meeting was held in New York City.
John retired from Tektronix in 1991. Because his writing was well known, he was able to consult in Japan as well as the US. He was asked to be a founding partner in a local electronics company named Preamble Instruments where he was Chief Engineer. The first product he designed there, a 100MHz differential amplifier, the 1855, was a big success and was largely responsible for Preamble's acquisition by Tektronix competitor, LeCroy Corporation of NY.
LeCroy still had the 1855 in its catalog 25 years later, an eternity in the electronics world! Preamble also did OEM for HP, so at one point, John became probably the only person ever to have products of his design in HP, Tektronix, and LeCroy catalogs simultaneously.

During his career John had the opportunity to travel widely, including to the Soviet Union four times, Greece four times, Japan three times, most of the countries in Europe, Rio de Janeiro twice (once during Carnival), Egypt (twice, climbing to the top of two Giza pyramids, which is more enjoyable than legal), China, the Society Islands, and Indonesia. His first trip to Egypt resulted in an interest in the ancient history of the Middle East. He published a technical article *Mathematics in Ancient Egypt*, in a local journal. He has also visited Israel twice and Jordan twice, all together visiting 50 different countries.

One of his current avocations is exposing Christian Apologetics as a fraud.

Randy Winkel

Retired webmaster

Randy worked at Tektronix for over 30 years and was responsible for creating and launching the original tek.com the service internet and extranet. He was a valuable person when Neal Robin, our last webmaster became ill.
In retirement, Randy manages the English Pit Shooting Range East of Vancouver and developing a business creating custom rifle stocks out of fiberglass on a CNC machine. Randy's health is good but he needs to focus on his business at this time. We hope that he will return when the pandemic is over.

Missing Byline

By Staff

In the last issue of the TEK RETIREE NEWS, an article about a Tek Field Engineer's visit to Newburgh, New York Air Force Base had the byline left out. Some readers did notice. The visit is a portion of a memoir in www.tekretirees.com, under the Contributed Stories tab, entitled 'A Chameleon Oscilloscope Career' by Bob Beville.
(This is similar to the credits of the motion picture "Saving Private Ryan". Cheers bartender Ted Danson's name was left out).

We Need Your Help

Reader submitted articles or we can interview you. Also other content for the newsletter is very much appreciated. It is a newsletter for, about and by all of us.

Thank You

Death Notices

Cameron, Gerry D. – d6/7/2020

Corder, Florene Fern Greta –d2/14/2020 At Tek 24 years

DeWitt, Laurie Streart – d5/21/2020

Fillinger, Russell Vaughn – d1/6/2017

Fosker, Rebecca L – d2/15/2020

Jollo, Arthur Tauno – 5/7/2020

Mellander, Donald Robert – d9/2019

Morris, Hugh G. –d3/20/2020

Morris, Lee, -d4/21/2020 At Tek 21.23 years

Parker, Donna Lea – d6/10/2020

Samuel, Charles (Chuck) Homer –d6/29/2020

Saucy, Tom, -d6/7/2020

Sterett, Jack Leroy – d6/6/2020

Telewski, Frederick J. – d6/29/2020

Trine, Wade Fredric – d5/20/2020

Weber, Verne F. Jr. - d5/12/2020

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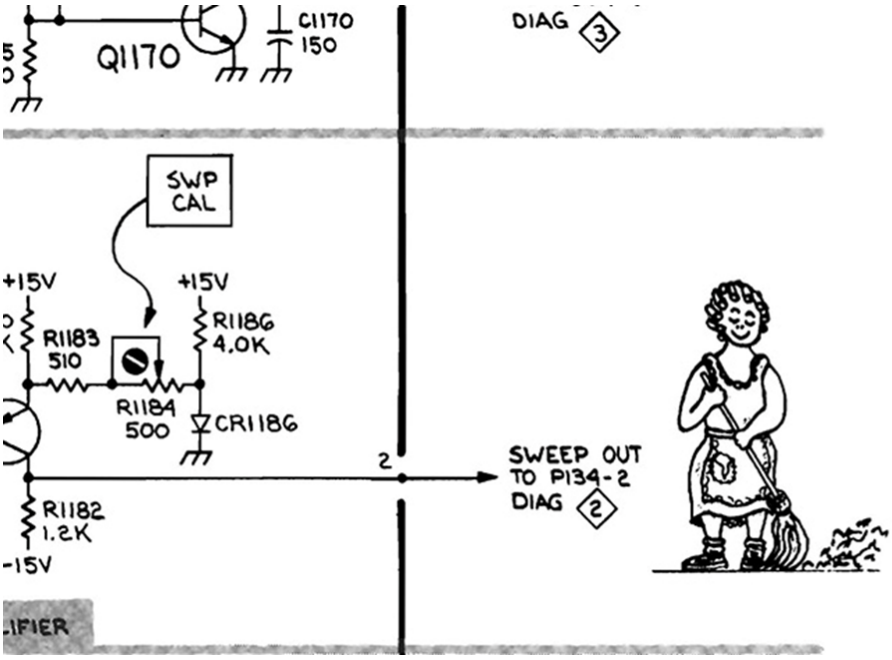
Saturday - 10am to 4pm
Other times by request

From Tek Manuals



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Details: Nick Hughes 541-548-1201

Ex-Tek Radio Amateurs

Weekly on Friday
Time: 5:30 PM
Place: Round Table Pizza
10070 SW Barbur Blvd
Portland, OR 97219

Your Updated Phone Numbers

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
Trust Fund: BeneSys
5331 SW Macadam
Portland OR 97239

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

401k Benefit

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

TEK RETIREE NEWS

Tektronix Retiree Volunteer Program TRVP

Web Page: www.Tek-Retirees.com A Newsletter for and by Tek Retirees November 2020

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Volunteer Needed at TRVP

We are in serious need of an editor. We have been functioning this year without one. The responsibility of the editor at the TRVP is to procure articles and do editing in MS Word. The job of the publisher is to produce the newsletter using MS Publisher.

In this issue we are publishing articles from the time of the Mt St Helens eruption. It appears these articles were mostly done on a typewriter and scanned into PDF files. The print quality was poor, so we hope that our translation to MS Word and MS Publisher is mostly accurate. We tried to keep the original formatting as much as possible so there is not consistent formatting.

As always we are in need of articles and are willing to interview anyone not writing a TRN article.

COVID-19 Time On My Hands

Gary A. Hoselton 16 AUG 20

Finding a little spare time, I drifted into these accomplishments:

April 2020: For decades I've run out of tablespoons and salad forks before the dishwasher is full enough to run, so hand-wash enough to fill in the gap. They are stainless steel, acquired with Betty Crocker coupons way back when. Early in the covid-19 sequestering, while again hand-washing several pieces of silverware, I got to wondering if I could find more pieces of it somewhere. St. Vinnies and Goodwill were closed so I tried eBay. It took a half hour to identify the pattern, Oneida Community Stainless Vinland, then, searching for that pattern, soon found combinations of what I needed plus other stuff. Also found wonderful extra pieces, such as large casserole spoons, slotted spoons, steak knives and other good stuff. I bought a half dozen different batches, great fun!

May 2020: Then, I realized I was hand-washing a few saucers and cereal bowls to get by till that dishwasher was full enough to run, so searched eBay for my Franciscan Desert Rose pattern and found many small combinations of dishes. Again, I patronized a half doz-

en sellers, and now have plenty of dishes.

July 2020: For years I've wanted to screen 35mm 3-D film in my home screening room, but have not been attracted to acquiring the traditional silver screen and messing with polarizers, etc. Starting in the 1980's, single-strip 3-D has over/under images on film, with half-high right eye image above the half-high left eye image, both in one frame.

I started thinking about the Dolby Technicolor 3D scheme introduced in 2010, which uses a regular matte white screen. A color wheel spins in a digital projector's light beam and viewers wear glasses, both passing specific colors using comb filters. The comb filters consist of dichroic depositions, which, for the left eye pass the warm side of narrow red, green, and blue bands, and for the right eye pass the cool side of these colors, with cutoff sharp enough that there is no bleed-thru of one to the other. Our brain combines these colors to "see" the complete color palette, and the different left and right eye images produce the 3-D effect. But, I use film, not digital, so no way to integrate a color wheel. However, the glasses lenses are comb filters. I started with a Sirius polarized 3-D projection lens, which has split input lenses adjustable to optical centers of over/under images, and removed the polarizing elements and installed left and right lenses removed from Dolby 3D glasses in their places. I increased xenon lamp current from 55A to 75A to make up for light loss in the comb filters, and get an excellent 3-D effect on the screen. So far, the glasses lenses are handling the powerful light beam just fine.

The Two Toms

THERE WERE TWO TOM HILLs employed at Tektronix:

Thomas **E**. Hill (1938-2018) served in the US Navy, 1958-1962, on the USS Ticonderoga, CVA-14. After military service, he was at Tektronix for ten years, the later years in marketing. At Beaverton High School, he taught Marketing for 30 years, retiring in 1998. This Tom Hill passed away January 28, 2018. His death notice was in the February 2018 issue of the *TEK RETIREE NEWS*.

The other, Thomas **C**. Hill III, is living in Warren, Oregon. He is an Electronics/RF Engineer. Tek employment 1974-2014 for more than 40 years, in TM500, TM5000, Spectrum Analyzers, and Export Control groups. Later he served as a consultant to Export Control until 2020, 46 years total. His radio ham operator handle is WA3RMX. This should clarify that he is alive to those who know this 'Tom Hill' but are misled by the other's obituary.

Mt St. Helens 1980 Revisited

Tek employees work had to create world class precision measurement instruments and in their spare time pursue hobbies that benefit society. TERAC focus was on communications for emergency situations. Mt St. Helens created an emergency situation. Communication was needed to minimize damage and minimize the loss of life.

Your Tektronix Retiree Newsletter has been given files of Tektronix Employees Radio Amateur Club (TERAC) members as they recorded events prior to, during and after the volcanic eruption of Mt. St. Helens, 18 May 1980. Here are the pre-eruption accounts as best as we could translate the actual accounts..

What to Do

What do you do when that nice snowcapped mountain in your back yard suddenly becomes a fire-spouting volcano? Amateurs in the States of Oregon and Washington found out when Mount St. Helens began erupting in March 1980. Hundreds of amateurs began helping the Washington State Department of Emergency Services keep an eye on the mountain. Other groups, such as the Tektronix Employees Radio Amateur Club (TERAC) began helping the scientific teams studying the mountain. Then, on May 18, 1980, a major eruption blew out most of the north face of the mountain and scattered volcanic ash over major portions of the United States and Canada. The explosion changed the mountain from a tourist attraction into a killer, and at least two amateurs are dead as a result.

In early April, shortly after the volcano began showing signs of activity, TERAC was contacted by a representative of the National Geographic Society and asked to help with a project to place remotely controlled cameras at several points around the mountain. TERAC was to provide the radio control equipment. TERAC members responded by desiring and building the required transmitter, encoder, receivers, and antennas in about two weeks (see July QST, page 28 for details).

On May 7, 1980 Roger McCoy W7ADV and Tom Hill W87FHF were airlifted by helicopter into the area north of Mount St. Helens where they assisted in installing two of the radio remote controlled cameras. These cameras were operated by Reid Blackburn KA7AMF from their Geological Survey (USGS) camp "Coldwater 1" located about 8 miles northwest of the mountain.

Less than two weeks later at 8:32 AM on May 18, 1980, Mount St. Helens blew her top. "Coldwater 1" was well within the blast zone and was covered almost immediately with hot volcanic ash. There was no chance for KA7AMF or for Jerry Martin W6TQF who was at the "Coldwater 2" camp several miles closer to the mountain. Jerry was observing activity for the Washington State Department of Emergency Services, and was the first to flash word of the eruption to the outside world. He then announced that he was going to try to get out, but neither his motor home nor the trailer of the USGS geologist at "*Coldwater 2" have been found since the area is still impassible on the ground,* Immediately after the May 18th eruption the authorities became quite serious *about keeping people away* from the danger area around the mountain. Before the 18th, there had been roadblocks installed on the main roads leading into the Mount St. Helens area. However, the area is forest land and there are numerous logging roads which allowed people to get around the roadblocks. The weekend before the eruption there was even a busload of college students which came into the area near the "Coldwater 1" camp, which was well behind the roadblocks. After the play 18th eruption, concrete roadblocks or "tank traps" were installed to permanently block many logging roads in the area. Other roadblocks were manned, and permits to get through them into the danger area were very hard to get.

On June 6, 1980 the Forest Service and the Mount St. Helens Scientific and Educational Coordinating Committee (SHCC), agreed that scientific parties would be permitted back into the danger area, but only if they have effective radio communications. The SNCC, which accredits scientific and educational parties seeking entry into the danger area, defined effective radio communications as amateur radio communications. They specifically excluded CB and mobile phone communications from consideration since these modes of communication were known to be unusable in the remote area around the mountain.

Dr. Leonard Palmer WAQA, a geologist on the staff of Portland State University, was instrumental in letting the scientists on the committee know of the value of amateur radio and how well it worked in the vicinity of the volcano. Dr. Palmer had carried a two meter handheld on numerous overflights of the volcano and knew what it would do. During these trips he had been able to maintain contact with a TERAC station in Portland on 146.58 MHz except when he was on the ground or .tow over the north side of the mountain. A high power mobile working through one of the repeaters in the area should therefore *have* no trouble providing communications throughout the: danger area close to the mountain.

Many of the scientists planning trips into the danger area had no idea how to contact an amateur radio operator to get the required communications, so the first problem for the amateurs was to provide a contact point for the scientists. TERAC helped by acting as coordinator for the operations, matching operators who had volunteered with scientific parties. TERAC also arranged for stations in the Portland area to monitor each trip and provide a link between the scientists and the Forest Service. This allows the Forest Service to order the scientific parties out of the danger area within minutes if necessary. The usual procedure for each of these trips is that the Portland station notifies tire Forest Service Radio Center in nearby Vancouver, Washington when a scientific party has cleared through a roadblock. The station also provides his own telephone number and the name of the leader of the scientific party so that the Radio Center knows who to call to contact each party. The amateur in Portland then maintains a log of each contact with the field party, including odometer readings at specified intervals and any other information which would help someone find the Field party if necessary. As soon as the scientific party clears the roadblocks an the way out this information is also given to the Radio Center.

Most of the: communications with parties south of Mount St. Helens have been handled on the 147.92/.32 ARCS repeater, which covers the south side quite well. Communications with parties north of the mountain have used the 147.66/.06 "Bawfaw" repeater on Mount Boistfort. This is the; only repeater *which works well on* the north side, and we appreciate being able to use it.

Many amateurs have helped with these operations, and their help is greatly appreciated although it is impossible to list them all. Other amateurs have helped simply by standing by when requested so that messages can be passed to or from field parties

Operations in support of the scientific parties are continuing with an average of 4 or 5 trips per week. We hope that *the* Forest Service will soon be able to provide the scientific parties with radios on Forest Service frequencies and some of us can go back to earning a living full time. Out as long as there is, a need, amateur radio will.be there.

END OF ARTICLE

For additional information contact;

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TERM' Activities Manager
125£3 S.W. Taylors Ferry Road
Portland, Oregon 97219

APPROXIMATE SEQUENCE OF EVENTS

TFRAC - "NATIONAL GEOGRAPHIC" CAMERA REMOTE CONTROL PROJECT

April 5, 1980 Saturday — On Saturday Roger McCoy (W7ADV), the TERAC Emergency Communications Coordinator, was contacted by Ron Mayer (K78T) if TERAC would be interested in helping the National Geographic Society by providing radio remote control equipment for five cameras to be located around hit. St. Helens. Ron had been contacted by Dr. Leonard Palmer (N7AQA) who is a geologist at Portland State University. The National Geographic team in the local area had contacted Dr. Palmer and asked if he could help with their project. Roger talked to Tom Hill (WB7FHF) and between them they determined that the project was technically feasible. The schedule at that time was for the cameras to arrive in town on Wednesday, April 9, 1980 and to be placed around Mount St. Helens on Thursday. Roger contacted Dave Lievsay (K7UUH) who in turn contacted the other members of the TERAC Board of Directors, who approved TCRAC participation in the project. The operation was to be conducted under Dr. Palmers license and call sign, since he would be on the mountain tit the control point roost of the time. After Dr. Palmer was informed that the TERAC Board had approved the project, he invited TERAC to join the National Geographic/Portland State University Scientific Team. lie indicated that they already had all the necessary clearances to place the cameras around the mountain.

April 6, 1980 Sunday — Roger McCoy, Tom Hill, Mike Metcalf (W7UDM) and Dave Lievsay started working on constructing the required equipment and tuning up the existing receivers. The plan was to use five of Roger's pocket pager receivers and add audio tone decoding. The receivers would operate in the 432 MHz region, hopefully to stay out of the way but still make them useful for the UHF contest in addition to this operation. Four of the receivers were found to have broken second conversion crystals. Tom designed a dual tone decoder, and five were built up over the next few days by Dave Lievsay, Lynn Hurd (WB7UNU) and Terry Biggs (W87CHK). Tom Hill designed and built. the audio tone encoder for the transmitter during this same period. Several first oscillator crystals were furnished by Deane Kidd (W7TYR) because we didn't have time to order any. Tom called Fred Stoker of the National Geographic local team to verify that we understood the requirements correctly and to ask for details about the camera and how it operates. Fred promised to call back Monday morning. It appeared from the conversation with Fred that our information was correct.

April 7, 1980 Monday — Team members worked on equipment, primarily the receivers and decoders. Some work was also done on the transmitter exciter. Roger did most of the work on the receivers, getting them going and on frequency. We had a lot of trouble finding crystals for the receivers. We needed second conversion crystals for the receiver: as well as the normal first oscillator crystals. Dave called International Crystals, Savoy, Sentry, and Cal Crystal with no results. Roger called most of the GE service centers and local service shops in the west looking for crystals. He found one second oscillator crystal in Seattle, which he ordered. Byron Witt (W7VOK), who evaluates crystals for Tektronix, called around to some of his contacts and found some usable crystals at one of his suppliers, Colorado Crystals. Colorado Crystals donated the crystals to the project, which we appreciated. Dr. Palmer was over at Tom Hills place **that night and showed** the people

working on equipment there some slides of the volcanic activity on the mountain. Fred Stoker did not call us back today.

April 8, 1980 Tuesday — Members of the group again worked on equipment. Mike Metcalf started to work ran the high-power amplifier for the transmitter. There were several telephone contacts with Dr. Palmer.

April 9, 1980 Wednesday — Members of the group again worked on the equipment. We weren't quite done with the receivers and decoders, but the cameras didn't get in either. Dr. Palmer said that National Geographic informed him that the cameras didn't get shipped. The crystals from Colorado Crystal and the GE shop arrived and were installed in the receivers. Dave constructed the 432 MHz vertical antennas and masts required.

April 10, 1980 Thursday — Members of the group worked on receivers, decoders, and the transmitter. All receivers were working and the transmitter was working. The cameras were supposed to be here but they were not. There was more confusion as to where the cameras are and even whether or not they exist. Chuck Shaw (OBFU) made up some special cables with a Selectrol connector on one end and a BNC on the other for the project.

April 11, 1980 Friday — Again the cameras did not show up. It appears that there is some problem with the National Geographic getting permission from the Forest Service to go into the area and set up the cameras.

April 12, 1980 Saturday — Again no cameras. Tom Hill talked to Fred Stoker of the National Geographic again, but hr. can't tell us when we will get the cameras. The transmitter and receivers are all done and completely checked out. We did find out that the camera enclosures were styrofoam boxes (coolers) with one end cut out, and with the camera wrapped with heat tape. The receivers will. therefore, tie subject to more temperature variation than originally expected. We did some temperature runs on the receivers in Tom's refrigerator, rind found out that we would have some problems with them going off frequency at low temperature extremes. Tom called Fred Stoker again to find out what was going on. As a result, a meeting was set up for Sunday when Fred was supposed to be in Portland. Fred also stated that he thought that the radios should run from *the same* battery that powers the heat tape, but he does not know what voltage this battery is.

April 13, 1980 Sunday — Still no cameras. We arcs talking with Fred Stoker of the National Geographic now more than we are talking with Dr. Palmer. We hear that the cameras are in Seattle, brat that they can't be released until the National Geographic group gets permission front the Forest Service and US Geological Service to install there. Roger and Torn design a temperature compensation network for the receivers *which* involves building a new oscillator. Communications test were run between-Portland and Dr. Palmer, who was in a helicopter surveying conditions on Mount St. Helen,. Dr. Palmer reported that hey could always hear the Portland station, even though he could not always talk tack to him. Dr. Palmer was using one of Roger's HT-220's on 146>.58. Fred Stoker did not show up, nor did the cameras.

April 14, 1980 Monday — The official spokesperson for Tektronix Inc., Susan Stone, was contacted by a reporter for the Oregonian newspaper, who had in turn been contacted by Dr. Palmer. She was asked for information on the project, *which she* called Roger to get. Roger gave her Fred Stokers number and she says she will talk to him tomorrow. Roger built the receiver oscillators that night.

April 15, 1980 Tuesday — Susan Stone talked to Dr. Palmer and Fred Stoker most of the morning. It turns out that Fred wants us to deal directly with him, rather than through Dr. Palmer. Also, it appears that the National Geographic will not get. their clearances and will not be able to be the primary sponsor of the project. However, the US Geological Survey in cooperation with the Columbian newspaper from Vancouver is interested in picking up the project. and sponsoring it. This might create some problems, since the National Geographic is a non-profit corporation, but the Columbian is not. Susan also talked to Howard Vollum (Tektronix Board Chairman) about the project and he approved use of Tektronix parts/resources for the project. Later that night Roger received a call from Dr. Palmer indicating an interest in getting a communications link between Portland State (i.e. a station in Portland that could talk to him on *the* mountain and also to Portland State by telephone) during a specific period during this week. Ile was also interested in technical support to radio data from some type of instrument on the mountain back to Portland State. There is also some possibility that Portland State and the Columbian will cooperate in a joint venture to place the cameras around the mountain. In this case we could probably continue to be involved since Portland State is a government entity, and we would be supporting them, not. the Columbian. Fred Stoker is supposed to call Roger at 11 AM tomorrow to set up a meeting to discuss what to do.

April 16, 1980 Wednesday — Fred never called, but Roger talked *to a* Mr. Steve Small with the. Columbian newspaper. According to Mr. Small, the LIS Geological Survey is very interested in obtaining the pictures, and would probably provide sponsorship. The Columbian would provide the cameras (only two) and they would be operated from the USES camp on the northwest side of the mountain. Apparently the Columbian has a ham on their staff who could be put on "vacation" for a week or two to operate the cameras. Roger told him we would need a written request from USGS. Mr. Small is going to talk to USGS and see what can be arranged. Apparently neither the Columbian nor the USGS is interested in working with Dr. Palmer. Dr. Palmer did not call nor did he pick up a radio for the flight scheduled for Thursday.

April 17, 1980 Thursday — A meeting was set up between Roger *McCoy and* Tom Hill of TERAC, Steve Small of the Columbian, Fred Stoker of the National Geographic, and [lob Christiansen, a geologist with the USGS for 2:00 PPS Friday. Roger and Tom intended to point out the problem of having a licensed ham operating the transmitter gas well as the limitations of amateur support of profit making companies. Dr. Palmer called Roger that evening and indicated that he felt he was being shut out of the operations. Dr. Palmer was not displeased with us or what we had done, but felt that it was a "political" problem due to all the media exposure he was getting. We informed him about the meeting scheduled for Friday. He said he was willing to help operate the cameras to get around the license problem. He will call Steve Small tomorrow. Dr. Palmer indicated that fie thought he could get the cameras placed with the TV Channel 6 helicopter if there was no other way and we had the cameras in hand. fie also said that the, radio remote control system could be used to control many other types of scientifically valuable instruments on the mountain if we don't use them with the cameras.

April 18, 1980 The meeting was held as scheduled and everyone (USGS and the Columbian)
Friday wanted to proceed with the camera project. It appears that the USES has a requirement that all photos would have to be "pooled" and available to anyone who wanted them. This was (1K with the others. The Columbian will. process the photos and provide the cameras and film. The USGS will work on the license problem by seeing if we can get government authorization for the transmitters, since 450 MHz is primary to the government. The USGS will also provide us with a letter indicating that the services we provide are fear them. The National Geographic may provide a similar letter. The National Geographic will provide the helicopter required to install, and service the cameras. TERAC will provide the receivers and technical support for setting them up and testing them. If the photos are used, TCRAC anti/or ham radio will be credited for assistance.
A major camera magazine (C35?) wants to do a story on the radio remote control system rind the amateurs involved with the project. The Columbian will provide photos and story to AP and UPI. We stressed that our „pay back" is good publicity on the largest possible scale for amateur radio first arid TERAC second. We do not want to publicize individuals. The time frame for installing the cameras is from 3-7 days to 30 days. If the mountain starts acting up again the National Geographic says they will get three more cameras somehow. TERAC indicated that they would like to see 0r. Palmer still involved with the operation since this would solve the operator problem. Not much enthusiasm was shown by the other participants in the meeting so the idea was dropped. The Columbian indicated that they would build up the camera boxes, but they didn't want to use the heat tape. The receivers may have to stand temperatures down to approximately I per the Columbian. We think that they might have to work down to somewhere around 0°F, although this is only a guess. Tom Hill checked the decoders and found that they had problems around 3ZdegF.

Roger Mc Coy

Members of the Tektronix Employees Radio amateur Club TERAC were recently saddened by the disappearance of Reid Blackburn in the area north of Mount St. Helena. Reid, had been using some radio remote control equipment designed send constructed by TERAC members to operate some cameras in the area for the National Geographic and the US Geological Survey. TERAC members had also been maintaining regular radio contact with Reid until the large eruption on Sunday, May 18,1980.

In late April, Roger McCoy (Portable Patient Monitors), Emergency Communications Coordinator fear TERAC, eras contacted by the National Geographic for assistance in a project to install remotely controlled cameras at several locations around Mount St. Helms. Roger and several other TERAC members constructed the radio remote control equipment nights and weekends over the next three weeks putting in over 300 man-hours on the project. On May 8, Roger and Tom Hill (TM. 500 engineering) were airlifted to the area to help install the cameras. The general idea was that the cameras could be located near the mountain where they could get good pictures, while the operator could tie farther back in a safer area Reid had volunteered to help the National Geographic and the USGS with the project fie camped at the USGS f=amp "Coldwater 1" ;;rid operated the cameras from there. Only if

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Danaher letter: we need your beneficiary for your life insurance
Everyone should have received a letter from Danaher over the past 2 months requesting you to name a beneficiary for your life insurance.

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Your information:
Last 4 digits of your SSN,
Birthdate,
Zip code of your home,
Your Password: upper, lowercase, numbers plus special symbol,
Phone pin number you create
Plus answers to 5 special questions

Beneficiary Information:
Full name and middle initial,
Postal address,
Phone number,
Social security number and
Relationship to you.
Thanks to **Mike Bonham**, for bring this to our attention.

Death Notices

David J. Andresen
9/23/1932 - 8/1 /2020

Nancy F. Andresen
4/6/1935 - 9/3/2020

Gerald Lee 'Jerry' Ashley
9/21/1943 - 10/8/2020

William Fulton Boggs
2/11/1937-7/19/2020

Eugene Earl Buell
3/6/1935 – 5/14/2020

Gerry D. Cameron
–d6/7/2020

Kenneth Charles Ellis
8/25/1929 - 8/19/2020

Kelly Leanne Franklin
10/30/1961 - 8/25/2020

Katherine Elizabeth Fretwell
2/6/1968 - 10/2/2020

Betty Jean Gosselin
11/7/1931 - 11/16/2020

Marilyn Hanson
3/27/1934 – 11/4/2020

Harry George "Hoot" Haugsten III 1/30/1948 - 8/22/2020

Richard Hunter Herdman
6/10/1931—8/20/2020

Bruno R. Jamsek
6/11/1942 - 9/4/2020

David J. Jurgensen
6/19/1938 - 8/3/2020

Donald Charles Kirkpatrick
4/14/1947- 7/1/2020

Phyllis J. Lindsley
6/7/1929 - 11/23/2020

Alfred A. (Sandy) Mikalow III
7/23/1945 – 11/27/2020

Dwane Mervin Romine
3/16/1934 – 4/4/2012

David Robert (Dave) Spinks
3/8/1924 - 7/25/2020

Edward M. Vaughan
4/29/1931 - 10/1/2020

Lawrence Harold Weiss
2/6/1932 - 8/2/2018

Paula Jean Yazzolino
4/17/1938 – 11/30/2020

Zoja Vaga
4/4/1919 - 10/10/2020

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(*Connects with Danaher benefits administration. Select one of the following categories or say "Agent" to speak with a person)*

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- Pension
- Life or AD and D
- Report death

CALENDAR

Engineering Breakfast

Wednesday 8AM Beaverton/ Hillsboro area. Lively discussion all subjects. For details contact Steven E. Rice: pacemakerpete@hotmail.com

Previous Tek-Employees Luncheon

Cancelled until further notice
Peppermill Restaurant closed
Details: Annetta Spickelmier
503-312-8825

VintageTEK Hours

Friday - 10am to 6pm
Saturday - 10am to 4pmOther times by request

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

Ex-Tek Radio Amateurs

Because of COVID we now meet:
Friday night get together
via ham radio.
Time: 7:00 PM
Place: TERAC repeater
443.650 MHz,
Positive offset, 100 Hz PL tone
"ZOOM meetings are also held. Details: Ron Kinder, k7vmn@arrl.net"