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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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

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;

David Lievsay K7UUN
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

Tektronix / Danaher Retiree Benefits

Internet: **mybenefits.mydanaher.com**
Phone: **800-964-7985** (8 AM to 8 PM EST Monday thru Friday)
(Connects with benefits administration)
Select one of following)
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401K
Pension
Life or AD and D
Report death
(or say "Agent" to speak with a person)

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.

We recommend all retirees contact Danaher Health and benefit center by computer or phone.

If you do not contact Danaher, I recommend you seek legal advice on status of life insurance without a beneficiary.

To setup an account you will need to provide

Your information:
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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

Tektronix Retiree Benefits

Danaher has now created a central point of access for Tektronix Retiree Benefits

Web Site: MyBenefits.MyDanaher.com

Or

Phone: 800-964-7985 (8 AM to 8 PM EST Monday thru Friday)
(*Connects with Danaher benefits administration. Select one of the following categories or say "Agent" to speak with a person)*

- Health care
- 401K
- 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"