

Clay's Corner for August 2022

Providing news and views from a broadcast engineers perspective since September 1986

Well, here we go, once again the 'heat of summer'...Near the end of July we were seeing

Hazardous Weather Conditions

With a Heat Advisory.....Perhaps some things to be thankful for –

- Unlike last year – Nothing (yet) forecast in 'Triple Digits'
- Unlike previous years – No smoke from fire (Yet)

If you are still doubting there is a change in our climate, consider that we – again – broke a high temperature record on the 26th of July – 94 Degees.

Good news (for me) - I will be working in Forks for the first week of August – Highs about 70 and lows In the upper 50s.

I was unable to make the annual Picnic on Vashon this year – The week preceding, my wife started having some heart issues (turned out to be PAC's). and my #2 Son had portions of his right leg amputated. Thankfully, both are doing OK.

A number of local broadcast stations began at locations other than where they are now, for example –

AM's -

- KVI- began as a Tacoma Station.

FM's -

- KIRO-FM/97.3, KBKS/106.1 and KHTP/103.7 began in, and are still licensed to Tacoma

TV's -

- KSTW/11 and KCPQ/13 began in, and are still licensed to Tacoma

Perhaps you did not know that KVOS began in Seattle in 1927 as a 50-watt blip operated out of an apartment on Queen Anne Hill? Neither did I. A fascinating bit of history here -

[KVOS radio in Bellingham wins landmark U.S. Supreme Court ruling against The Associated Press on December 14, 1936. - HistoryLink.org](#)

The days when you could go out and purchase a radio for your Kitchen (or other room) are largely gone. Today, a home radio is likely not be an OTA (Off the Air) device, but rather an Internet connected device like Alexa. Or perhaps a home PC where the user streams a local radio station.

Today, radio just about 100% depends on those receivers mounted in vehicles. This is why the NAB and EBU are working so hard on their relationships with Carmakers. These efforts were in play during a recent 'World DAB' conference in London.

The US (and Canada) are, perhaps, unique, in that we still have a lot of broadcasting taking place on the AM band. Vehicle makers are interested in phasing out AM in vehicles for a couple of major reasons –

- The challenge in dealing with the electronic systems used in many vehicles, conventional and electric power, that create a lot of radio-frequency noise.
- The continued decline in the popularity of AM Broadcasting.

The other challenge facing Radio is the competition for other items on today's dashboard. The days of the simple – 2-knob, slide-rule dial, 5 or 6 pushbutton radio are long gone. First, we had the Tape and then CD players, now we have every electronic gizmo that can be conceived all vying for the same space. Broadcast organizations are fearful the radio will be come 'lost in the shuffle'....Some have even suggested a 'Dedicated Radio Button'. On the positive side, vehicle makers want content in their cars and radio has the ability to deliver 'tons' of it and all for relatively low cost. To that end, NAB has been working with the firms like Google with systems like their 'Android Automotive'

I noted a change of location for Alex Brewster to Montesano. He's been living in Kitsap County for some time. Alex, if you recall, is now working with Gates Air doing field service work.

I've always liked clever signs that reside in engineering departments at broadcast stations. For years I had one that read –

DANGER! – NO VOLTAGE!

I recently ran across this one – Certainly worthy of placement on the door of the Chief Engineer, especially in this day of having to, periodically, 'Power-Cycle' things to restore functionality.



Tis that time of year again for the annual NAB Marconi Award Nominees to be announced. For this area, no waiting for the winners to be announced in October – No person or station in the PNW named this year.

I'm sure we are all familiar with this one- **"The reports of my death are greatly exaggerated"**

The text of a cable sent by Mark [Twain](#) from [London](#) to the press in the United States after his obituary had been mistakenly published.

Perhaps in the same vein, the CEO of Netflix recently declared ..."Linear television will go the way of the dinosaur within the next decade" Which reminds me of how the same thing was to happen to Radio when TV came along. Sure, all forms of magnetic tape, film and other means of have gone away. But what the Netflix CEO, Reed Hastings, fails to understand is that broadcastings 'Point-Multi-Point' system is superior, as is our ability to provide – free to the consumer – incredible content.

As you are aware, legendary broadcast engineer, James Boyd recently passed (see last months Column). Kent Randles recently distributed the following picture of those that gathered for the Wake for James Boyd. Kent is in this picture, 3rd from the left, on the left. There are many familiar faces at the table.



Kent also forwarded a video of the salute and taps for James Boyd at his funeral at Willamette National Cemetery it's at

<https://youtu.be/aRJ5LeaVFO8>

A, well known, vendor of IP Codecs has been running this ad -

US Copper Shutdown Imminent



Switch from POTS and ISDN to IP Today Before It's Too Late!

It's the end of POTS and ISDN as we know it...

When the FCC 19-72A1 order takes effect from August 2nd, 2022, the shutdown of remaining POTS and ISDN services in the US will commence and become real for many broadcasters.

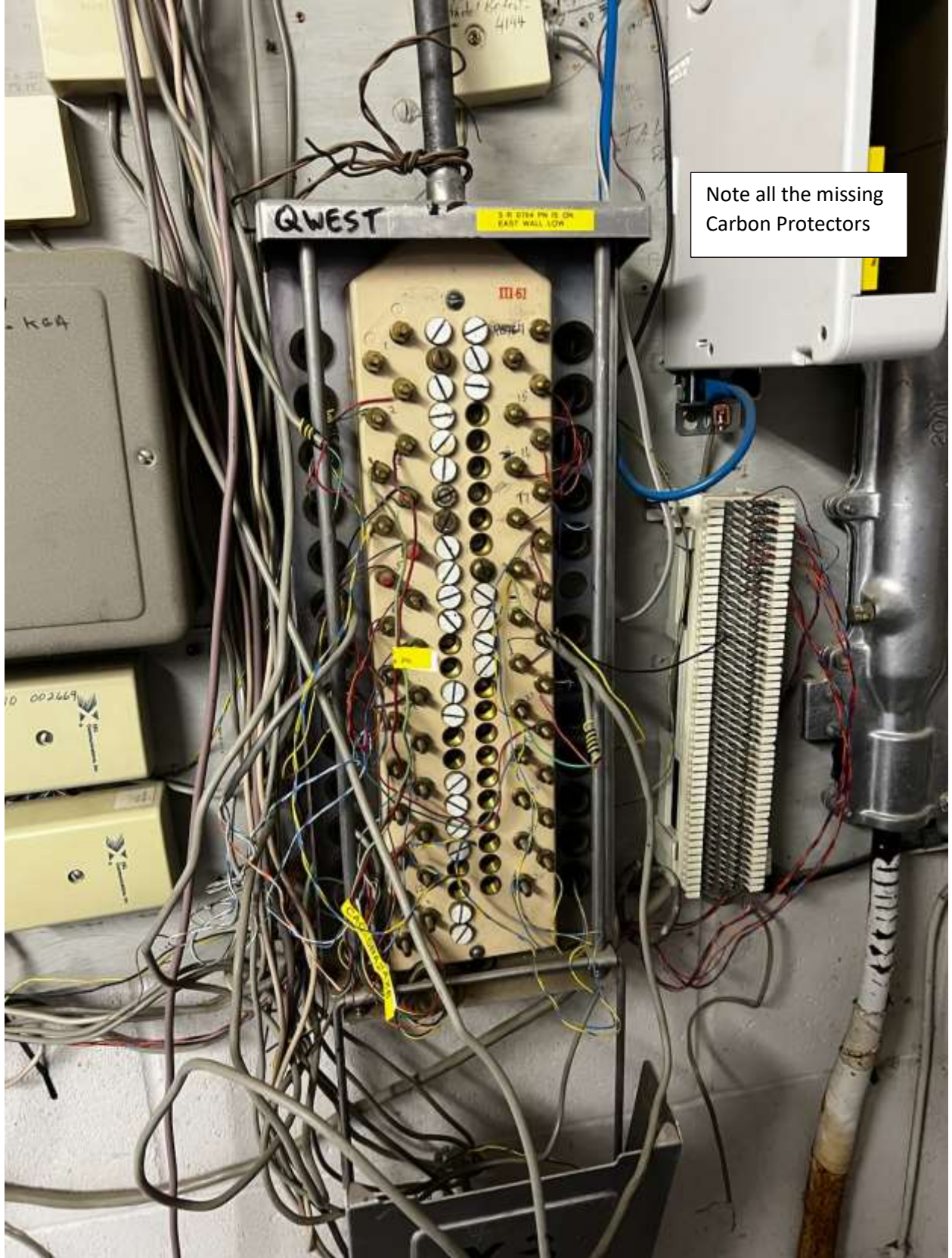
From the looks of our local 'Telephone Company' infrastructure, he may be right. Everywhere I go I see Telephone 'Pedestals' that have been driven over, covers gone, wires hanging out etc. The following picture of a terminal at an un-disclosed location' in Eastern Washington, speaks volumes –

Those that took pride in their work at the telephone company are no longer working there. It's hard to see any future for the copper 'plant' the telephone companies used to rely on being around very much longer.

I'm glad that Gary Hart is no longer around to see what's happened to the infrastructure he used to take so much pride in.

Granted the 'telephone companies' are investing in Fiber, as they should be. Today the big players are firms like Comcast that were able to 'repurpose' their coaxial cable networks to handle Internet services are, as they say – 'Eating their lunch'.

One of the major broadcast sites I work at on Cougar Mountain is a prime example of this shift. The telephone company terminal has just a few remaining connections. Meanwhile AccelNet and Comcast have moved in with Wireless and Fiber circuits.



Note all the missing Carbon Protectors

One of the most famous AM Radio Stations in the Country is WLW in Cincinnati. Like a lot of AM's, they have had to face the fact that all the land consumed by their big broadcast tower could produce considerable revenue if developed for other purposes. 'Tower Park' is the new development in the works for the WLW site.

Unlike some AM's that have either elected to share the use of other towers, or terminate operations, WLW, apparently, intends to continue operating with other uses sharing what used to be protected turf....Their antenna ground system. The 747 foot tower will be sharing the 26.7 acre site with restaurants, office buildings and a 700 vehicle parking lot. Here is a portion of the plan. You can see the towers location looking like a spider in the middle of a web.



This is – not – a small tower – In addition to being 747 feet tall, its 35 feet wide In the middle and has 8 guy wires. Typically a guyed tower is a 3-sided structure with the same width from top to bottom and only has guy wires extending in 3 different direction.



Here's a closeup look at the middle of the tower –



Perhaps good news for the historic big AM's in our area as that most of them are either on Vashon Island or in swampy land that it not attractive to real estate development.

One aspect of this that will be interesting is the matter of RF interference to other electronic equipment.... Not to mention damage from falling ice. This could be interesting !

The tower is not owned by the Broadcast Station, but rather by a firm called Vertical Bridge who purchased the tower from iHeartMedia and leases it back to them.

WLW transmits with a power of 50,000 watts on 700 kHz.

Looking for a job in Broadcasting ?

Broadcast Engineer

Close Date: August 31, 2022

Where to Apply: <https://www.alphamediausa.com/careers/>

Alpha Media, Portland is looking for a full-time Broadcast/Studio Engineer with a passion for broadcasting *and* live sound. This position will be responsible for Engineer duties related to station broadcasting as well as assisting with recordings and sound production for our Live Performance Lounge located in downtown Portland, OR. Reporting to the Chief Engineer, the Broadcast/Studio Engineer will assist with the maintenance of equipment, maintaining broadcast systems and technologies, build-out projects, and ensuring FCC compliance. *Broadcast Engineer experience and current SBE membership required.*

Headquartered in Portland, Oregon, Alpha Media owns or operates over 200 live broadcast radio stations and digital properties covering all formats serving 44 markets across the United States. In addition to our over-the-air broadcasts, Alpha audio products can be heard across multiple platforms, including all major smart devices. Strong relationships with our listeners and clients in the communities where we live and work keep Alpha Media true to its local-first heritage.

Responsibilities may include, but are not limited to the following:

The successful candidate will be familiar with radio-related technologies including, but not limited to, networking and IT, PC/software maintenance and repair, AM and FM transmitter repair and installation, VHF and UHF radio technology, digital and analog audio, EAS equipment, and broadcast studio equipment maintenance.

- Installs and performs maintenance on control consoles, boards, recording equipment, microphones, digital audio systems, transmitters, controls, remote equipment, etc.
- Performs necessary measurements of equipment performance.
- May have responsibilities relating to IT.
- Lead event AV setups from start to finish.
- Operate A/V equipment in a live show setting.
- Responsible for setting up FOH soundboard, lights and stage plots, and inputs for performances and presentations.
- Responsible for managing booth sound to ensure high-quality audio is captured and edited during performances, optimized for live stream, radio clips, and video content.
- Must have a proficient understanding of camera (video and photo) operation as well as a deep understanding of live-stream programs in order to efficiently oversee part-time staff during events and ensure a successful online experience for fans.
- Must have experience with stage/event lighting and be willing to program and assist during events.
- Other duties as assigned by the Chief Engineer.

Required Knowledge, Skills & Abilities:

- Knowledge of all applicable FCC rules and regulations.
- Technical knowledge of electronics and electromechanics.
- Current SBE Membership.
- Experience with cluster-wide studio equipment and operations, audio routing, AES and AoIP protocols, digital audio delivery and radio automation systems, EAS, studio telephone, and engineering IT systems.
- Knowledge of electrical systems, UPS, and standby generators and recordkeeping.
- Knowledge of telephone systems and protocols including POTS, 1A2, ISDN, T1, DSL, VoIP, and PRI circuits.
- IT skills including PC/server troubleshooting and repair and knowledge of TCP/IP, UDP, and local area networking.
- Manages technology inventory to ensure everything is functioning and stored properly, including camera equipment, stage lighting, house lighting, soundboards, speaker systems, hard drive storage, and miscellaneous A/V equipment.
- A proficient understanding of Front of House audio setup and operation.
- A proficient understanding of camera (video and photo) operation as well as an understanding of live-stream programs.
- Experience with stage/event lighting and be willing to program and assist during events.
- Ability to work varied and changing schedules (nights, weekends, and early mornings included).
- Excellent written and verbal communication skills.
- Excellent problem-solving ability and skill in prioritizing.
- Interact with management and staff at all levels in a personable and professional manner.
- Ability to multi-task and handle pressures and deadlines.
- Must possess a valid driver's license and current vehicle insurance.
- Must be 21 years of age or older.

Preference will be given to candidates who have the above experience *plus* the following :

- Associates or Technical Degree in Broadcast Engineering Technology or related field or an equivalent combination of education and work experience.
- Experience with WideOrbit Automation for Radio.
- Experience with Axia AoIP
- Experience with Directional AM Systems.
- Knowledge of telephone systems and cellular.
- SBE, Microsoft, and CompTIA Certifications.

Physical Requirements:

- Ability to lift and/or move loads up to 75lbs.
- Ability to climb ladders and work on elevated surfaces.
- Ability to be on 24 x 7 x 365 callout for after-hours emergencies or routine maintenance as needed.

BENEFITS

Alpha Media invests in people who invest in themselves and offers employees a competitive package of health and welfare benefits.

- Employer-sponsored medical, dental & vision insurance with a variety of coverage options.
- Employee Assistance Program (EAP) for full-time and part-time employees, as well as all household members at no cost.
- 401(k) with discretionary employer matching.
- Paid vacation, company holidays, and a birthday day for you to use during your birthday month.
- Alpha Cares – paid volunteer hours.
- Pet adoption subsidy.

Alpha Media is a diverse multimedia company that merges the attributes of broadcast media and digital media to serve our clients and communities. We hire and retain top talent who are unique, innovative, and vibrant, and we provide them with a culture of support to help each person achieve their professional goals.

Alpha values Integrity, a Can Do Attitude, Passion, Competitiveness, and Creativity, and embraces that work can be FUN. If these qualities are important to you and you feel you check off the qualities we are looking for, apply now at <https://www.alphamediausa.com/careers/> and let's talk.

Alpha Media is an equal opportunity employer and participates in E-Verify.

As we all know, Inflation is raging. Not long ago, having a 'Mega-Buck' in savings would mean you were a 'Millionaire' and were 'In the Chips". A recent, published, survey, shed new light on this one. Assume you are living in Seattle,

Question How long \$1 million would last?

Answer About 14 years. (With Inflation raging, that number is sure to go down)

Question How much money do you need to be making to afford the 'Average' house in Seattle?

Answer At least \$100,000/ Year.

Once again we have the results of another study of what would happen with a major earthquake along the 'Seattle Fault'. Seems to me that every study comes up with more disastrous results. The latest shows a 7.5 (less than the 'Big One' that's forecast for off the coast) would put 20 feet of water along Seattle's shoreline and could reach 42 feet at the Great Wheel and reach both of the big sports venues in SoDo. Wow! Hopefully, I'm old enough that I won't see this.

From the 'Do you remember Dept' –

On July 10th 1962, 60 years ago, the first communications satellite that could relay TV signals across the Atlantic was launched. Telstar broke a lot of ground. Compared to today's satellites, Telstar was a 'Mini'. Less than 3 feet in diameter and weighing only 171 lbs. Do you also remember the 'Pop-Song' with the same name? Unfortunately I remember all of this...(Yes, I'm that old) and I was working in a Tacoma area Radio Station at the time.

How about this one – Do you remember when the Russians launched Sputnik? I recall receiving it's 'Beep Beep' on my old Hallicrafters receiver as it passed over.

Wow we have come a long way!

A Florida Radio Station did a big No-No recently. The FCC came to visit and were denied access!.,.,,Even after they showed their badges and credentials etc. (OOPS)! Violation #1 – FCC rules state that licensees must make stations available for inspection

This goes back to March of this year when agents from the Miami field office attempted to inspect the little, Low-Power FM station. WDZP in West Palm Beach. The Commish said they had 20 days to explain their actions and how the situation will be rectified.

We've never had a 'Franken FM' in the Seattle area so a bit of background thanks to Wikipedia

These stations transmit an analog FM signal centered at 87.75 MHz, designated by receiver and station marketing as "87.7 FM". This is just below the lowest FM band frequency of 87.9 MHz, thus receivable by most consumer radios. Although primarily functioning as radio stations, they are formally licensed as TV stations, thus are still required to provide some sort of video signal in order to comply with FCC regulations.

These are VHF, channel 6 TV stations, which operate as radio stations capable of being picked up by standard FM receivers. These stations are colloquially known as "Franken FMs", a

reference to Frankenstein's monster, because TV stations functioning as radio stations had not been envisioned by the FCC which commonly refers to these stations as "FM6" operations.

What's new is the new FCC, finally, may act and create some structure.

On May 17, 2022 [Jessica Rosenworcel](#), head FCC commissioner, announced that one of the agenda items for an upcoming FCC Open Meeting, "Preserving Local Radio Programming (MB Docket No. 03-185)", "will consider a proposal to allow these broadcasters to continue their existing FM6 radio service, provided that they meet certain conditions, including interference protection and the provision of a synchronous TV service to consumers."^[6] However, this agenda item was dropped as being no longer needed,^[7] due to the June 6, 2022 adoption of a "Fifth Notice of Proposed Rulemaking" for MB Docket No. 03-185, which requested additional public comments about the best use of the frequencies assigned to TV channel 6.^[8]

Meanwhile the NAB feels they should be left in place....Will be interesting

The FCC has been dealing with another matter, this time something, not broadcasting, that impacts just about everyone – Robocalls. The Commish announced that it was ordering phone companies to block call traffic that the agency believes is part of a massive car warranty robocall operation responsible for 8 billion illegal robocalls since 2018. (I received mine) An interesting twist on this effort – They are going after the phone companies telling them to not accept traffic from them.

Those that read this column have certainly determined that I am concern about the amount of mis-information that's been flowing through our airwaves. Unfortunately, one of the impacts of this has been the erosion of trust in the news media. A recent survey shows it's down to about 26%...The lowest in the World according to a study released in June by Reuters. The study shows the 'right-leaning portion of the sample dragging the numbers down...At the same time, the left-leaning trust has gone up. It seems that there is a segment of our country, on the right, whose goal is to plant the seeds of mistrust whether it be in elections, government or the media.

Here are some of my observations regarding June Seattle area Radio Ratings –

- In the #1 slot is (again) KIRO-FM
- #2 is KJEB, the iHeartMedia Classic Hit station, perhaps proving that changing call letters has little impact these days. PPM's don't really care what the call letters are, it's the sub-audible information that tells the tale. Something that would not have been possible back in the days when people had to fill out diaries.
- KUOW continues their winning ways coming in at #4

- KEXP is back with a nice increase placing them at #6. Pretty cool when a station, with a, relatively, small coverage area, can do so well.

- The highest rated AM is KIRO/710 is at #7 (Perhaps thanks to the Mariners)

- The next highest rated AM Station is KNWN (KenWen) at #12

- Perhaps proving that it's not a fluke – There are 5 HD-2's in the race

- Several AM's continue to struggle with very minimal numbers, all belonging to IHM, KJR, KHHO and KPTR making me wonder if we will see these, obviously poor performing station be spun off.

As we are seeing – the day of the Electric Vehicle is certainly here. A recent survey showed that California has over 23% of the EV market, followed by Texas with 13.9%. We (Washington State) come in at #6 with 3.4%. Thankfully a good percentage of our power comes from renewables. In fact, our two major cities are doing very well at producing power using non-carbon sources...

Tacoma at 97% and Seattle at 89.6%.

Other areas of the country are not quite so fortunate – As the following illustrates

Another load of electric car fuel leaving Wyoming!



Perhaps another concern for those that own EV's in certain areas of the country? Many are discovering that a summer heat wave, when AC units are running long to keep residents cool, is a bad time to be charging electric vehicles. Tesla owners in Texas have been asked to avoid charging their cars to avoid having their electric grid crash. Tesla has responded by sending a notification to owners in Texas and California asking them to avoid charging between 3 and 8 PM.

Generating power from Solar has a lot of appeal, however, the price of a critical metal may put a damper on new solar projects. Polysilicon has recently jumped in cost by 190 %. This has driven the cost of large-scale solar project up more than 25% from a year ago. We have some 30 solar power facilities, east of the Mountains, for example.

I found this on Facebook – Hard to believe it's been 9 years since Arne passed.



Debra Skoog

July 22 at 8:47 PM · 🧑



Today is always hard day for me. I lost Arne nine years ago today. I used to dread this day. Now I remember those sweet last moments with him, but I also remember the fun we had. The trips to all the damn transmitters in WA.

I miss him

I wish he could be here

But I know my path will always be guided.



Have you seen this ?



As you may have quickly noticed, Washington is one of those places where UFO's are more frequently seen.....BUT WAIT, THERE'S MORE !!! Not only that – Washington State is ranked – NUMBER 1 in UFO sightings per 100,000 residents.

We have a long history with UFO's or UAV's

Remember it was Kenneth Arnold that saw a number of them near Mt Rainier in 1947, where we learned his term to describe them ' Flying Saucer'

Then there was this story from 1947 ... Harold A. Dahl reported to authorities that his son had been injured and his dog killed by flying debris from four to six circular objects in what became known as the "Maury Island Incident"

"A witness was also apparently threatened by characters wearing all black, which became the inspiration for the popular 'Men in Black' movies decades later."

Have you every seen one (or more) ?? Me neither.

My faithful cellphone (Samsung S5) was getting near the end of life so I went out and invested in a new S22+. The camera is something to behold (you can look up the spec's on-line). I

shot the following about 10 PM on the 7th. Yes, that's the Moon. It's amazing what these cellphone cameras can do these days. You can look up the S22+ and see the spec's if you are curious.



This one take on the 15th of Mt Rainier with a 'cloud cap'



If you recall, in a previous column, I mentioned we had adopted a puppy – Well, after a couple of months, Annie is adapting quite well, including getting along with our other dog, Yagi. This picture was taken on the 23rd as she was 'catching some rays' laying on the deck. The red-hair on her head is now sporting streaks of white. Now if the rest her would grow to match those ears!



My column would not be complete without a contribution (or two) from Dwight Small –
This one looking East toward Glacier Peak



And this one, looking West at dusk



If you have a picture to share- Please send it my way !!

Hope to catch you here next month

Clay, K7CR, CPBE

SBE Member # 714

Since March 1968