

Clay's Corner for June 2022

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

If you have been enjoying our Spring, you must be a long-term resident. April turned out to be one of the coldest in decades. The good news is, after fears of a low snow-pack, late season snowfall in the mountains has erased the fear with now nearly 130% of normal white stuff up there.

One of the casualties of this past winter was with the National Weather Service transmitter for the Portland area. As 'Murphy' desired, the transmitter had issues when the high elevation site, was snowed in. The following was posted to the EAS Remailers on May 25th –

Tuesday 5/24/2022, our technicians were finally able to access the NOAA Weather Radio Transmitter site which serves the Portland, Oregon area. They have made temporary repairs until replacement parts arrive and another trip can be scheduled to the site.

At this time the signal remains somewhat scratchy, but we believe the signal should be good enough to carry the SAME encoding and produce a functional EAS message.

PORTLAND AREA BROADCASTERS: Please reply to this message, or email me at jon.bonk@noaa.gov, should you not receive today's weekly test as scheduled between 11 AM and Noon.

Thanks for your patience!

-Jon

NWS Portland

NOAA Weather Radio Operational Focal Point



Portland, Oregon National Weather Service

Weather Forecast Office

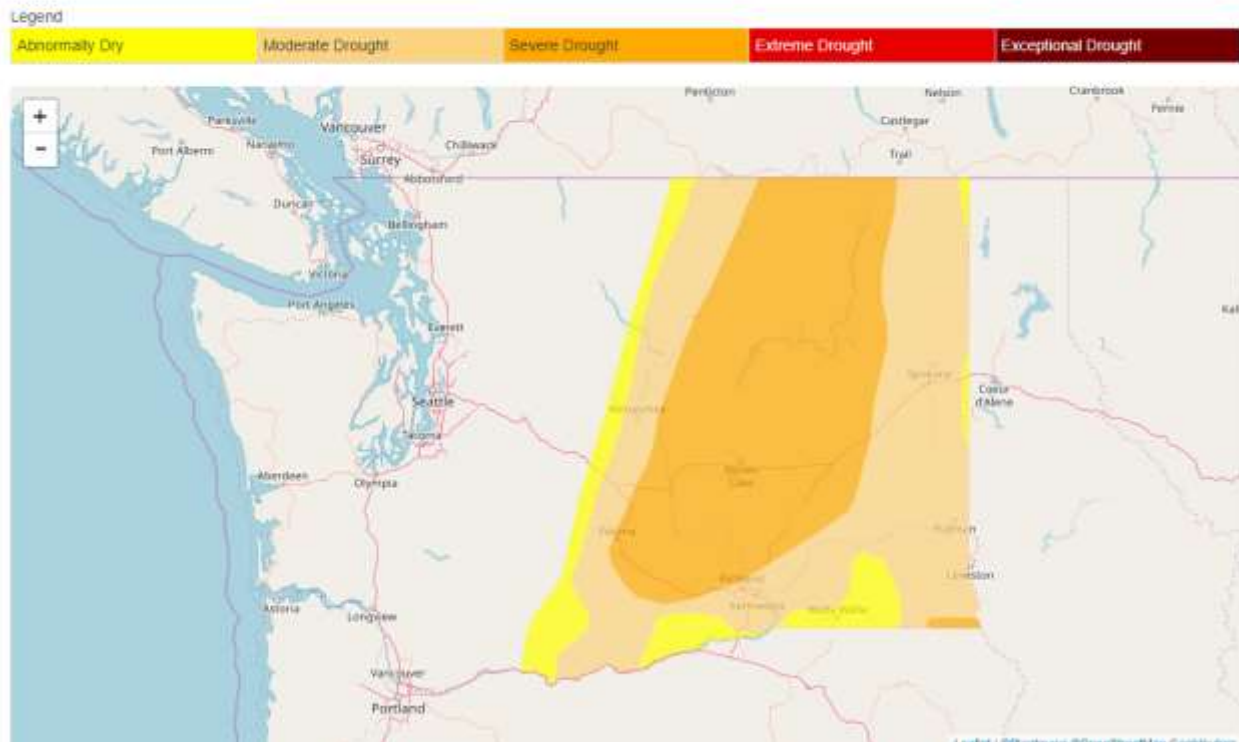
FYI – The NWS Transmitter for the Seattle Area (KHB-60/162.550) is located on Cougar Mt where access is rarely an issue.

As we rolled into May, we had to wait until the 22nd to get temps into the 70's in Seattle.

Frankly my lawn has been reacting favorably, perhaps a conspiracy designed to get me more exercise behind the mower.

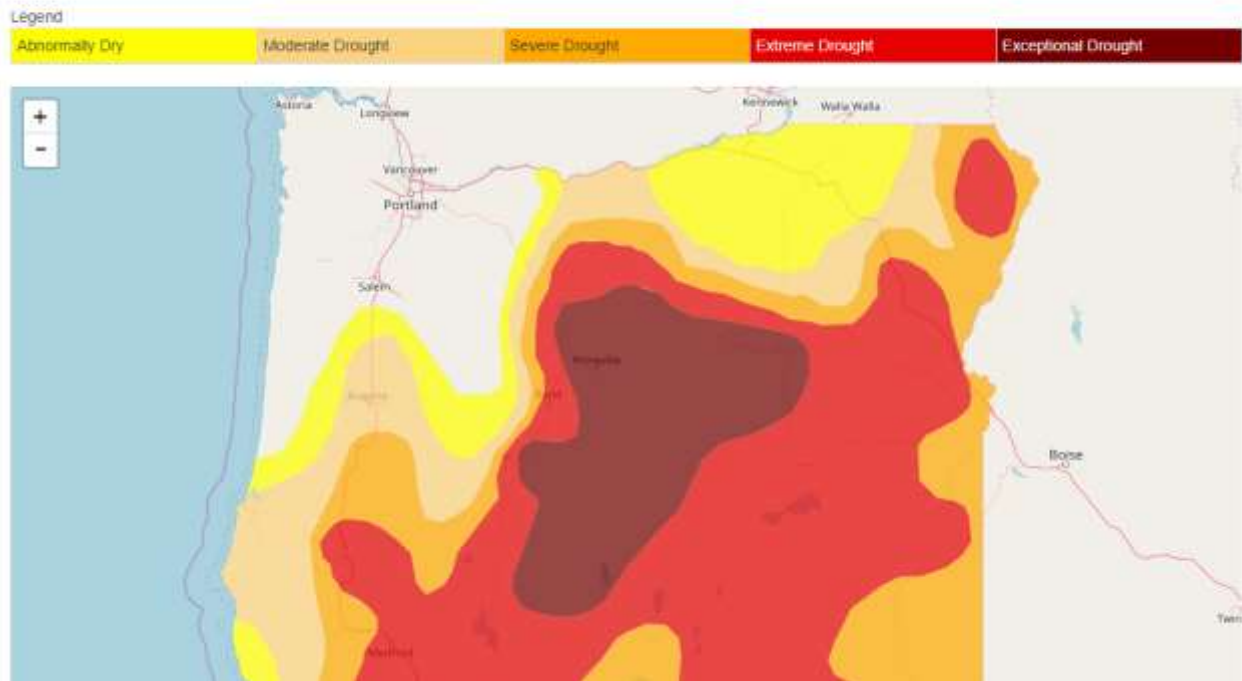
Western Washington looks to be safe from the projected drought, the forecast, issued May 17th. It shows that precip. in our corner of the world will be, pretty much, normal. Meanwhile, the Eastern part of the State, as shown below, is going to be very dry with much of the area projected to be severe drought.

Washington Drought Conditions Map - May 17, 2022



You don't have to look very far south to see things are projected to be much worse –

Oregon Drought Conditions Map - May 17, 2022



Much of the Western U.S. is in bad shape. With a real crisis in many areas. Especially in those areas that depend on water from the Colorado River for drinking, irrigation and generating electric power. Those of us in this area are truly blessed !'

Temperatures are the wild-card. If you are like most of us, we're OK...But – Please – NO MORE of those 100 + days !!

Something that we have not had to write about in a very long time- The danger of reporting a war. Thus far, Russia's attack on Ukraine has killed 23 members of the press thus far. The major cable and broadcast news organizations have record numbers of reporters, and support personnel working the war. Add to this print media from around the world you have a lot of exposure to becoming a casualty also. Personally, I have found myself checking the following for information about the conflict – CNN, BBC, Reuters, Al Jazeera and MSN. How about you?

We've lost another giant in our industry. The following was posted by Kent Randles on Saturday May 21st.

It is with a heavy heart that I inform you that James Boyd K7MKN passed away yesterday, of a heart attack, at his home. In ham-speak he's now a "Silent Key."



He was 76...Services to be announced.

For those of you that did not know James – He operated a business called 'Boyd Broadcast Services' providing technical services for broadcasters all over the PNW from his base in the Portland, Oregon area. James was very technically savvy. Had a lot of test equipment and knew how to use it. He did work for many broadcasters in the Seattle area as well. For me, he performed the annual NRSC Measurements on the Local Auburn Station.

Not long ago, he was told by his doctor that his time was short and to stop working. In response, he told me – **'I can't, what would I do?'** One time James was quoted as saying - **"I don't have any desire to quit. If I won the lottery, I'd still work. I like what I do, and I'm not going to stop. Where else can you play all day?"**

This is where James and I had a lot in common. We turned our hobby, Ham Radio, doing what we love into our vocation. They say if you truly love what you do, you will never work a day in your life.

James had a wonderfully, infectious, laugh....and I always loved to make him do so.

He was very well known with everyone that knew him having nothing but respect. His loss creates a giant void. We all will be very lucky if, when we pass, we have so many that have these kind of comments about us. We could all do well to try and be more like James Boyd. If we did, it would be a much better world.

Filling his shoes will likely require the work of many !!!.

Here's a picture of James, along with some others you may know

Engineers Tom Cauthers, Ev Helm, Randy Pugsley, James Boyd (in the Red Shirt) and Kent Randles



There have been a lot of comments posted regarding his passing – I want to share a few with you –

After the initial shock and sadness, the first words that came to mind were “straight shooter”. Be it regarding world events, a client, a piece of gear, personal life, or even his own health struggles, he never obfuscated. He just told it exactly how it was, with succinct honesty and a smile. This might have made it harder for him to bluff, when playing poker. You’re already missed, James. The world could use a bunch more like you.

**Michael D. Brown N7AXC
Brown Broadcast Services, Inc.**

I note with regret the news of the passing of Oregon engineer James Boyd. A heart attack they say. I had the pleasure of working with James while in the Oregon area, always a pleasant experience no matter how dire the situation of the day. A real professional we could all do well to emulate.

Ron Martens

Oh, I'm so sorry to hear that. It was always a pleasure to work with James, and I had so many things to ask him. Joe Harrington

I treasured my occasional breakfasts with James at Biscuits Café on Barnes. As an old guy but a newbie to the Portland engineering scene a few years ago, I found his guidance and his acceptance to be incredibly comforting. RIP, James Boyd! A life well lived!

Dave Doherty

Bainbridge Island, WA

I first got to know James when, after he returned from his Vietnam military service, he went to work at KSRV under the direction of that station's excellent engineer (whose name I have now forgotten). Then when my friend Gary Capps bought KGRL in Bend, James moved there to be chief engineer. And eventually he moved to Portland when Gary bought the Mt. Scott FM station. And in all those years of knowing and getting to work with James he exhibited his incredible skills at problem solving and his equally wonderful personality. He put up with station owners who didn't know much except how not to spend money, and kept their stations running anyway. And whenever we needed some information or a measurement or background data he was always there to help. He is a truly irreplaceable person, as fine a friend as one could ever have.

Ben Dawson

James was a master in the art of Broadcast Engineering and an top notch Amateur Radio operator - his level of dedication to his clients was a wonderful example for all of us.

RIP, James & 73

Marty Hadfield

James was one of a kind. A great person and a terrific engineer. Fortunately for me, I went to visit James Thursday. We had a nice chat about a number of things, mostly broadcasting of course. I told James that he is irreplaceable. It was my second time in the last couple of weeks to see James. James seemed to appreciate the bottle of Tequila I brought him and, promised to give me a review. He told me he intended to stick around until next December. Unfortunately, fate had other plans.

Randy Pugsley

I first met James Boyd in the 1980's after I moved up here from Oregon. I found him to be a very competent and knowledgeable engineer and I am sorry he has past. Rest in peace James, you will be missed.

David Ratener

I first met James over 40 years ago and have had the pleasure of working with him several times up until his retirement. I would regularly hear him check in to the Oregon Emergency Net on 3.980 until not many days ago. James was the best. There just aren't enough adjectives in my vocabulary to describe how he will be missed.

Joe Korpela

James was a heck of a guy.
May he Rest In Peace.

Ed Bukont M.Sc., CTS

I had the pleasure of working with James a number of times. A great guy and truly gifted Engineer. Our industry will really miss him.

Bill Glenn

When I was Editor of Radio Guide, I was really pleased to be able to award membership in our Hall of Achievement to James. He wasn't one of those who blew his own horn, but was known as someone ready to help others. Later, he did a very nice explanation of the NRSC measurements for me for the BDR.

<https://www.thebdr.net/understanding-am-nrsc-measurements/>

James exemplified the mark of a true broadcast engineer and colleague.
The industry lost another good guy.

Barry Mishkind

I'm glad I was able to spend some time with James over the last couple months while Thor and I helped organize his garage. Facing terminal illness with an uncertain timeline, he remained optimistic, generous, and brave. I will miss James' sense of humor, his historical knowledge of broadcast facilities in the region, and his willingness to help with any problem at all hours of the day and night.

Mike Everhart, Corporate Director of Engineering

Alpha Media LLC

My deepest sympathy to James Boyd's family.

Officially, I met James Boyd in 1997 when the ABIP, a joint initiative between the FCC and the state broadcast associations to enhance compliance in the FCC's broadcast services, was introduced by the FCC Portland Office to the OAB.

In my opinion, James was a very good engineer. Representing the licensees, James assisted me in investigating and resolving many high-profile interference complaints: Interference to VHF frequencies utilized by commercial aircrafts in Klamath Falls and in Hillsboro, Oregon; Interference to Washington County's Public Safety Communications (WACCCA); Co-channel interference on clear-channel 1130 kHz between Canada and the US...

The most memorable investigation was the clear-channel 1130 kHz investigation, directed by the FCC International Bureau, James assisted me in verifying the predicted "field parameters" of a newly constructed AM broadcast station in Oregon, a 4-tower directional array, in which James built this station from scratch! James showed me a few tricks on how to calibrate the FIM-41 to reduce the field strength levels below 10 mV (holding the meter horizontally and using my body to shield the meter away from the transmitting antennas), and just like a mathematician, James explained to me how the monitoring points were predicted using MOM, and how the complex numbers were used to calculate the current and phase ratios... on and on.

Folks, I am losing a good friend and a very good mentor!

Binh Nguyen, Senior Agent/Electronics Engineer

Federal Communications Commission

Enforcement Bureau

Portland Office

And the May 25th headline read –

Networks Cover Texas School Massacre With Shock, Anger And Resignation: “Every Time, We Pray Things Are Going To Be Different”

Another mass shooting killing many young children and teachers. The shooter, a troubled 18 year-old, who had recently, legally, purchased assault rifles and 375 rounds of ammunition, was among the dead.

As they have done so many times in the past, all of the electronic news media jumped on this story devoting considerable air-time to covering the tragic event. As in so many previous, similar, incidents, this will re-ignite the debate over how to keep this from happening and, at the same time, protect the rights of those that will defend the right to own firearms.

Also likely, the debate will become a political issue further dividing this polarized country. As if Covid-19 were not enough.

Broadcasting will, again, be playing a role in this issue with news coverage and, of course, this will become fodder for Talk Radio and certain Cable News outlets that appear to 'feed' on this kind of thing. Perhaps we need to remind ourselves of how the matter would be handled in Russia where broadcasting, or saying, something negative could land you in jail.

Computers have changed everything in broadcasting I can think of...and the movement continues. On May 19th the FCC has moved to permit using computers to be used to 'model' directional antennas for FM Stations. Prior to this change, the makers of FM Broadcast Antennas had to create either a scale-model or a full size antenna and then use a 'test-range' to prove it would work as designed. This change will likely alter the way antenna manufacturers do business.

Dielectric, one of the major broadcast antenna makers was in favor saying -

The move by the Federal Communications Commission permitting FM broadcasters to transition from physical modeling is more than just the first directional FM pattern verification rule change in 58 years. Dielectric says the change will speed up product to market timelines, helping broadcasters upgrade facilities more quickly. "May 19, 2022 was a monumental day for FM broadcasters. The FCC adopting new rules allowing the use of computer modeling changes the rules for FM antenna modeling, which for decades has required broadcasters to build physical models and collect measured data to verify antenna patterns," said Dielectric President Keith Pelletier.

In addition to speeding things up, he says computer modeling has better accuracy and offers the ability to run infinite patterns to maximize on FCC protections that will allow broadcasters ease of mind. "They can now have confidence that they are getting the best possible solution, all while not having to wait the traditional timelines for range testing and optimizing," said Pelletier.

The FCC was acting on a proposal filed last summer by four of the makers of FM Broadcast Antennas, Jampro, RF Systems, Shively Labs and Dielectric as well as several broadcast ownership, and the NAB. ERI, one of the major players in this field, was opposed.

According to the FCC, more than 20% of FM's today use directional antennas.

Thanks to Jason Royals, a great picture of the KWSU-AM Transmitter Site in Pullman –



Thanks to Cara Fry, the new GM at NWPB, for the following picture taken of KWSC in 1957. The station is now known as KWSU and is celebrating 100 years of broadcasting from Pullman.

A couple of things in this picture got my attention....The Gates Yard Console, Large turntable to the left ...and, of course, that Rotary Dial telephone to the right.



I'm still seeing stories about the 'outflow' of high-tech workers due to Russia Ukraine mess. It appears that the exodus of their best and brightest was not factored into some of their decision making. Experts on global migration and Russian population are calling the current exodus Russia's single fastest since the 1917 Bolshevik Revolution, when millions of intellectuals and economic elites fled the rise of the Soviet Union. The Russian Association of Electronic Communications has estimated that 100,000 or more are expected to leave or have already left. This is out of an estimated 300,000 that have left since the war began.

According to Bloomberg, President Biden wants highly educated Russians to come here and has proposed a strategy to relax visa requirements for Russians with a degree in in STEM fields. Biden wants to attract Russians with expertise in semiconductors, space technology, cybersecurity, advanced manufacturing, and artificial intelligence

In another development related to this conflict - A Ukrainian group is pushing the FCC for a hearing over the renewal of licenses for Multicultural Radio. Their concerns are centered on the fact that stations licensed to the firm are airing Radio Sputnik whose programming consists of attacks on the United States. Meanwhile, Multicultural argues that free speech is involved. Seems to me there are a number of 'voices' on the air today whose positions are opposed to what many believe. The question is – How and will the FCC react?

Meanwhile, the FCC is seeking graduates for EE positions. The Commish recently advertised for openings for, full-time positions paying \$41,000 to \$97,000 per year. The process will close once 175 applications have been received, or on May 26th

If working for the FCC does not interest you, perhaps a job with Alpha Media in Portland? Here's how the notice reads -

Studio/Broadcast Engineer

Close Date: June 30, 2022

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

Alpha Media, Portland is looking for a **full-time Studio/Broadcast Engineer** with a passion for broadcasting and music. 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 Studio/Broadcast Engineer will assist with the maintenance of equipment, maintaining broadcast systems and technologies, build-out projects, and ensuring FCC compliance.

Alpha Media's original Live Performance Lounge located in downtown Portland, Oregon, has hosted more than 200 live events in a given year including music performances, content creation, conferences, broadcasts, screenings, viewing parties, comedy, and more. With capabilities to stream internationally, and by leveraging Alpha Media's robust broadcast media connections, the Live Performance Lounge has hosted performances by world-class artists like Ed Sheeran, Portugal. The Man, Shawn Mendes, Jason Aldean, Maren Morris, Graham Nash, Adele, and many others.

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.

Broadcast Engineer's 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.

LPL Studio Engineer's responsibilities may include, but are not limited to the following:

- 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.
- Manages technology inventory to ensure everything is functioning and stored properly to include camera equipment, stage lighting, house lighting, soundboards, speaker systems, hard drive storage, and miscellaneous A/V equipment.
- Coordinate with Lounge Manager to hire and/or partner with outside technical support for events.
- Must have experience projecting multiple presentations for a large-scale event and/or conference.
- Will have creative services duties to produce and edit audio and/or video content for Alpha Media during lounge downtimes.
- Ability to work varied and changing schedules (nights, weekends, and early mornings included).

Required Knowledge, Skills & Abilities:

- Knowledge of all applicable FCC rules and regulations.
- Technical knowledge of electronics and electromechanics.
- 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.
- 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.

Education and Licensing Requirements:

- Associates or technical degree in Broadcasting Engineering Technology or related field or equivalent level of experience.
- SBE Certifications are a plus.
- Must possess a valid state driver's license, a clean driving record, and proof of insurance.

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**, **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.

DebLuchs | Business Office Assistant

1211 SW 5th Avenue, Suite 600 | Portland, OR 97204

A couple of broadcast sales to note -

Washington -- Allen Blum's W-Squared Communications has filed a \$2,000 deal to buy the Wenatchee, WA-licensed K280BZ at 103.9 FM from Frank Osborn's Husky Broadcasting. The station currently simulcasts Cherry Creek Radio's hot AC "KW-3" KWWW, Quincy, WA (96.7).

New Jersey -- Sunil Hali has filed a \$750,000 deal to buy the Parsippany, NJ-licensed translator W244DU at 96.7 FM from Erick Salgado's Cantico Nuevo Ministry. Hali is manager of "Radio Zindagi USA" which leases WXMC, Parsippany, NJ (1310) from Cantico Nuevo Ministry which is the primary station for the translator.

In the event you missed the call letter and format shuffle – Here is a quick summary-

- iHeartMedia has created Seattle's first – all sports station on FM with 'Sports Radio KJR (950 AM) now simulcasting on 93.3 which was, historically KUBE playing rhythmic CHR.
- The call letters, KJR-FM used to reside on 95.7 which was called '95.7 the Jet' 95.7 now sports the call letters KJEB

Here's a look at the latest Radio Ratings for Seattle-Tacoma

- Taking over the #1 Spot is 106.7- KRWM
- KIRO-FM was 'bumped' down to #2
- KJEB, formally KJR is #3
- #4 is Non-Commercial KUOW
- The two Country Stations continue to duke it out with the Wolf now leading the Bull.
- HD-2's continue to attract listeners with 5 of them listed.
- KNWN is still the number one AM (with help from their simulcast 97.7 and 101.5 HD2)

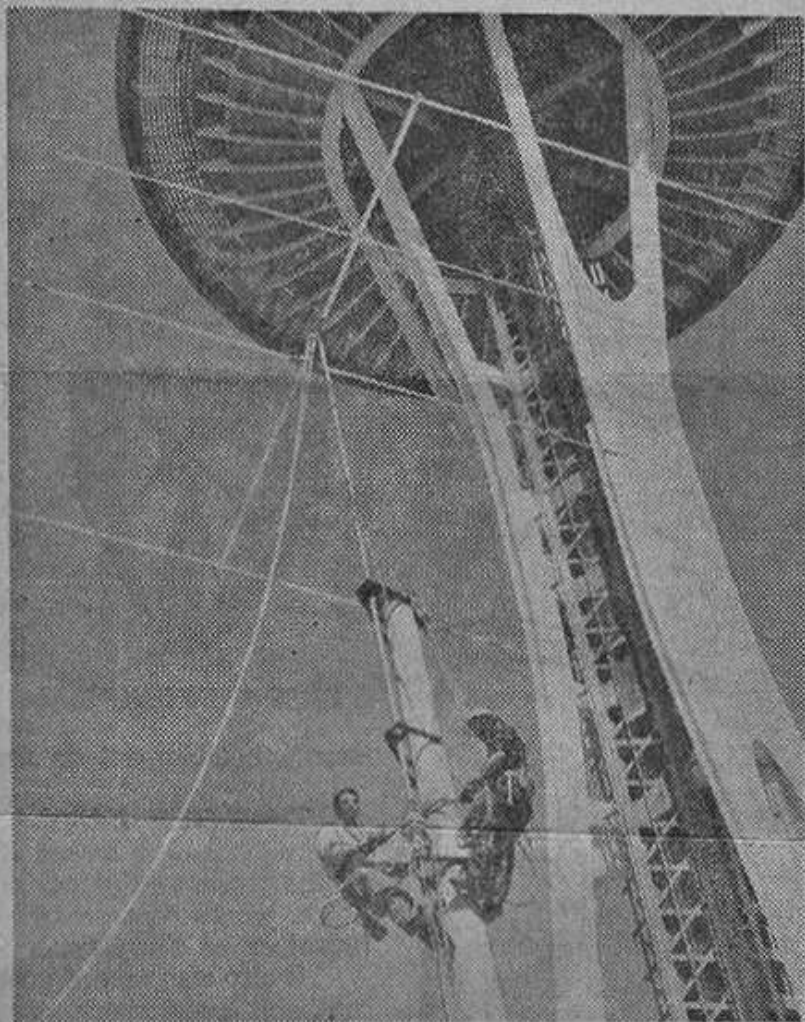
In my May column, I mentioned a 6 meter ham repeater at the 1962 Fair in Seattle. I received this from Jim Leach –

You wrote about a 6-meter FM repeater and I remembered I had a couple photos of an HF Yagi setup I found online (somewhere) about 20 years ago. I continue to enjoy your newsletter and thanks!

Jim sent along these pictures –

K7USA TO OPERATE:

Fair's 'Ham Radio' Antenna Installed



FAIR STATION: Two workers adjusted the antenna of the World's Fair "ham" radio station, K7USA, yesterday under the Space Needle. Amateur radio operators will operate the station in the Alaska Pavilion, handling messages between fair visitors and their families in Alaska.



Some things happen in smaller markets that would – never – be tolerate in larger ones.
Example – Turning off the power to a large area to permit maintenance on a sub-station. Can you imagine, PSE, Tacoma Power or Seattle City Light doing this?



...

West End Outage Scheduled for Sunday, May 22, 2022

A scheduled power outage will affect electric service on Sunday, May 22, beginning Sunday morning at 12:01 am and lasting until approximately 6:30 am.

This planned outage will affect all customers west of Lake Crescent, including Forks, Neah Bay, Sekiu and surrounding areas.

The outage is required for Bonneville Power Administration to conduct maintenance on their Sappho substation. Clallam PUD crews will also take advantage of the outage to conduct maintenance on our system.

If you have any questions, please contact: 360-452-9771 or 1-800-542-7859, or info@clallampud.net



Planned
Outage
Scheduled

Can anyone identify this device? If you can, drop me a note and tell me what it is.



Last month I wrote about the loss of Harriet Bullitt -



In response – I received this from Michael Brooks who works these days at KING-FM

I'm fortunate to be working for a radio station founded by a most remarkable family. We recently lost one of the family members, Harriet Bullit at age 97. Harriet's mom began KING Broadcasting back in the 1940s. Imagine if you will a woman owning an AM, FM and TV station in the 1940s. Yep, she was the first to do so. KING Broadcasting started with an AM station, then grew to include TV and FM stations as well. In their twilight years Harriet and her sister Patsy eventually sold off KING Broadcasting but as their mom had a special fondness for classical music and especially her Classical KING-FM, they placed the station's license in a trust to ensure that it would remain true to its format. We've been spinning the classics since 1948 and continue to do so to this day. How we came to get those KING call letters is an interesting tale. Seems that Dorothy wanted the call sign KING as the station is located in King County, WA but that call sign was already granted to a maritime mobile station. Dorothy researched and found that the ship with that call sign would be coming to the Port of Seattle. Dorothy, like her daughters, is a force of nature to be reckoned with. When the ship with the desired call letters got here, she rowed herself out to greet the captain and persuaded him to give up the call letters. Here's a bit more about Harriet and this remarkable group of women broadcasters

Dwight Small contributed this item -

MIT Invents Ultra-Thin Speakers For Wall Mounting



Here is on for you:

<https://gizmodo.com/mit-invents-ultra-thin-speakers-wall-mounted-noise-canc-1848842742>

I've heard this expression for many years...However, I never knew that I should be crediting someone for coming up with it.

"Healey's Law"

Named after Denis Healey, the British chancellor who himself experienced the difficulty of resetting a country's finances when he negotiated an IMF Bailout in 1976): **"Follow the rule of holes; if you are in one, stop digging."**

A corollary is –

"When your opponent is in a hole, why would you want to take away his shovel?"

Being old, I can't resist the temptation to write about things that were- In this case – Devices I used when I started in Broadcasting for recording and playing back audio -

To start with – The historic Magnacord PT6.



Some of my memories –

- Placing a matchbook cover under the Fast-Forward lever (it was very slow)
 - Other wise you would have to set there with your finger on that lever.
- How rewind was extremely fast.
 - I recall coming into a studio where someone had left the room with a tape rewinding. The entire reel of tap was reduced to little in-long pieces all over.
- How many people would not properly thread the tape.
 - Over and around the first roller (The top one in this picture) then under the second one.

Maggy's, as they were called back then, predated the bigger machines produced by Ampex, Crown, Berlant-Concertone etc,

Love this ad for Magnecord. Shown here are a couple PT6's, with different electronics. Note the person holding an RCA 77DX Microphone....and, of course, a Patch Panel that would confuse many.

The call letters, WISC, are still in used with a TV station in Madison. Wisconsin

HE PREFERS

Magnecorder

Radio Engineers Use More Magneorders Than All Other Professional Tape Recorders Combined

Magnecord later came out with the Model P60, shown here. I worked with a pair of these at KFHA in Lakewood in 1961.



These machines, later called Reel-to-Reel recorders, were the main-stay for many years. The adoption of these machines spelled the end to the disc-recorders that were in use for a long time. They were, commonly, used for recording and playing back of long programs, as well as for commercials.

Often small, 3 or 4 inch reels of tape were used with about 90 seconds of tape separated by what was called 'leader' (white paper tape). The operators log would have an entry that would read 'T9-C4'. This meant Tape #9, Cut #4 was to be cued ready for air play. Back then, a DJ would have 2 or 3 Tape Decks, and 2 or 3 Turntables that they were constantly loading and unloading. Trust me, you were very busy.

In the middle to late 60's these critters came along. An endless loop tape in a plastic box called a 'Cartridge'...or 'Cart'. This was an adaptation of a device that was being used in stores for the playing of background music (You do remember stores playing music for their customers don't you?), Those machines were often made by Viking and played larger cartridges also made by Fidelipak.



Radio and TV quickly adopted this method of handling short audio segments.



One of the early makers of machines to record and playback 'Carts' was 'Spotmaster'. We had one of these when I started at KMO in 1966. This used the Viking Model 36 Deck.



Spotmaster did not have the market to themselves. There were many others in the game. Perhaps the most successful was ITC. Shown here was their 'Delta' Series machines that continued to serve the industry until they were replaced with computers.



Here's an ITC machine designed to play 3 'Carts' at the same time



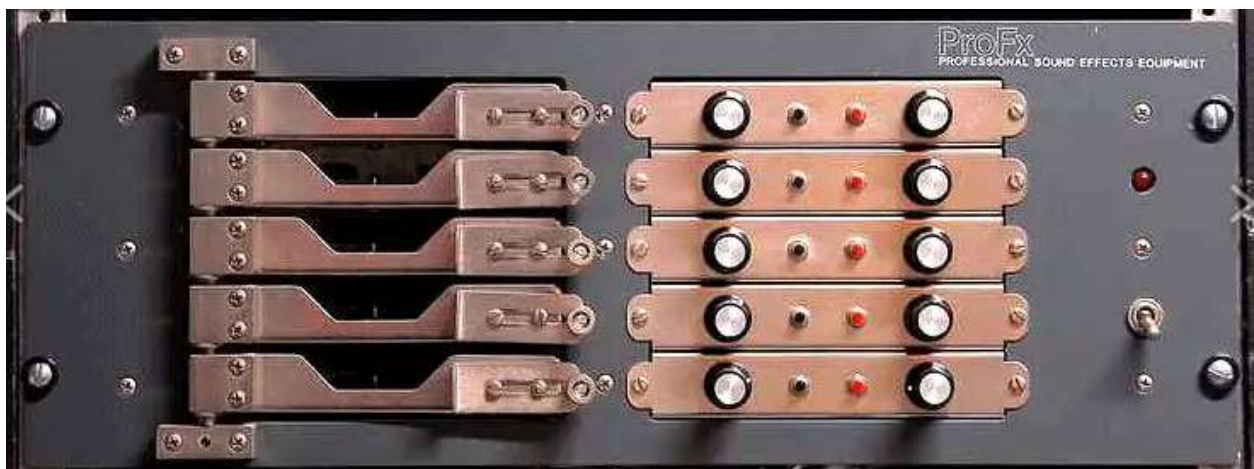
Perhaps the idea for the endless loop tape machine came from Mackenzie?

<https://modestoradiomuseum.org/mackenzie-repeater-broadcastings-first-cart-machine/>

<https://www.reelradio.com/reports/mackenzi.html>

[Mackenzie Laboratories, Inc \(macklabs.com\)](http://Mackenzie Laboratories, Inc (macklabs.com))

I remember one of these, in the on-air studio of KVI when they were in the Tower Building.



A term you hear used these days is 'Gaslighting'. Perhaps you don't use it because you are not sure of what it means – Read on - Gaslighting is a colloquialism, loosely defined as making someone question their own reality. The term may also be used to describe a person who presents a false narrative to another group or person which leads them to doubt their perceptions and become misled, disoriented or distressed.

gaslighting, an elaborate and [insidious](#) technique of deception and [psychological](#) manipulation, usually practiced by a single deceiver, or "gaslighter," on a single victim over an extended period. Its effect is to gradually undermine the victim's confidence in his own ability to distinguish truth from falsehood, right from wrong, or reality from appearance, thereby rendering him pathologically dependent on the gaslighter in his thinking or feelings.

As part of the process, the victim's [self-esteem](#) is severely damaged, and he becomes additionally dependent on the gaslighter for emotional support and validation. In some cases the intended (and achieved) result is to rob the victim of his sanity. The phenomenon is attested in the clinical literature as a form of [narcissistic](#) abuse whereby the extreme narcissist attempts to satisfy his pathological need for constant affirmation and esteem (for "narcissistic supply") by converting [vulnerable](#) people into [intellectual](#) and emotional slaves whom he paradoxically despises for their victimhood. Because the gaslighter is himself typically psychologically disordered, he is often not fully aware of what he is doing or why he is doing it.

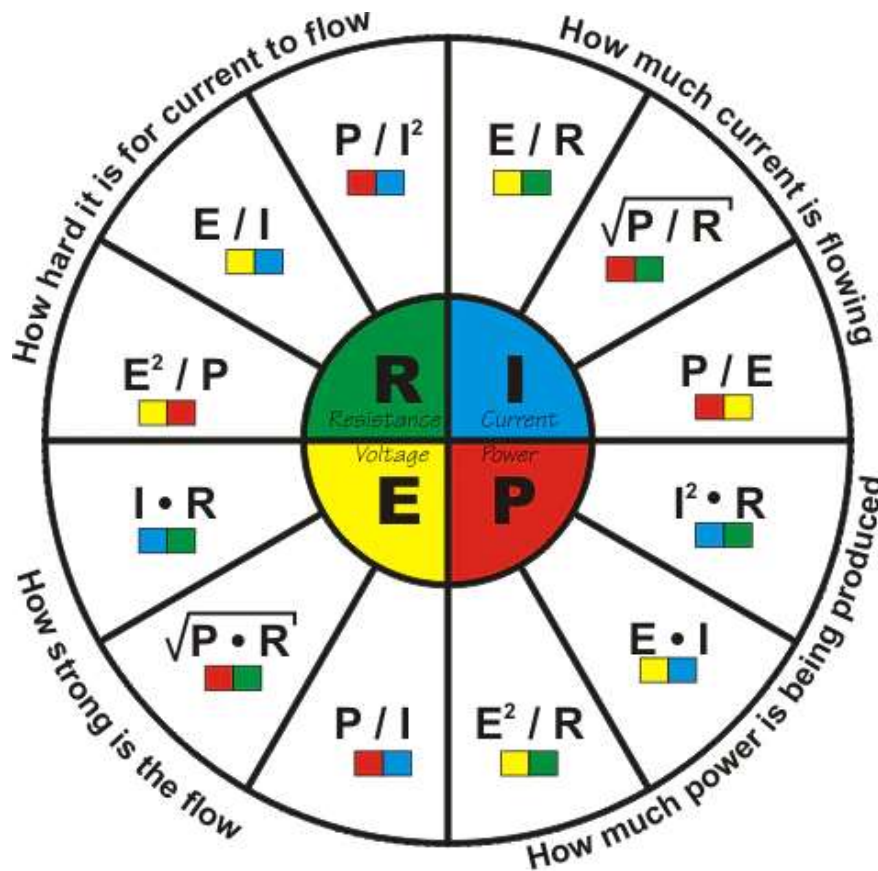
I love variations of the 'keep out' warning sign – here's one -



Another, out the window of the plane, picture contribution from Stephan Lockwood of Hatfield and Dawson on his way to Chicago of West Tiger Mountain. Look close and you can spot the towers.



There are a lot of things that we 'older folks' take for granted. For example, Ohms Law or Watts Law. I recently forwarded this item to some 'newbies'. Perhaps others will find it useful.



On the personal side – Last month I had a picture of a couple of dogs that I thought were cute. Well, one of them has become a part of my family. It's been some time since we had a puppy in our house. She is smart & quick and quite a challenge. Meet 'Annie'. She's a JRT Mix.



Yes, we still have Yagi, our Giant Yorkie. Happy to report they are getting along just fine.



As I have mentioned in the past, I have a grove of firs that prevent me from seeing summer sunsets (very nice on hot days, however). Meanwhile, Dwight Small has a mountain that prevents him from seeing winter sunsets. So - it's now Dwight's turn to 'show the colors' The following was from the evening of May 16th.



Or this one from May 24th – SPECTACULAR !



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