

Clay's Corner for December 2022

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

In last month's column I wrote about how legendary, Bay Area, KGO was switching from its long running news to Sports Betting. Just as I emailed my Column to those that run it came the following news from Inside Radio

...Hubbard Seattle is launching a 24/7 sports betting format on KNUC-HD2 using programming from VSiN, The Sports Betting Network. Under the partnership, Hubbard adult standards KIXI (880) will air Brent Musburger's "Action Updates" twice each weekday as well as "VSiN Prime Time." With this and other recent affiliate additions, VSiN content currently airs on more than 140 terrestrial radio stations in 33 states nationwide, including both long-form content clearance and "Action Updates." "With the incredible growth sports betting has seen in recent years, we saw this as a great opportunity to capitalize on that rapid expansion and the specialized content VSiN delivers," Market Manager Trip Reeb said in a release.

Sports betting is a great opportunity for Broadcasters to boost the bottom line, I suppose. (I'm not a lawyer, so this is only a guess). I noticed recently some of the local Indian tribes are advertising their sports betting opportunities. If you've been to Vegas, you have likely seen how much is dedicated to this endeavor.

I found the following FCC item to be interesting in light of all the Radio Broadcasters that have either never initiated HD operations, or those that installed their equipment long ago and are still running the initial power level (-20 dbc)

Released: 2022-11-28. MEDIA BUREAU SEEKS COMMENT ON PETITIONS FOR RULEMAKING PROPOSING AMENDMENTS TO FM BROADCAST DIGITAL RADIO RULES. (DA No. 22-1226). (Dkt No 22-405). Seeks comment on petition for rulemaking and combines with earlier-filed petition for rulemaking, both proposing power increases for FM digital broadcasts. Comments Due: 2023-01-12. Reply Comments Due: 2023-02-13. MB. Contact: Albert Shuldiner at (202) 418-2721, email: Albert.Shuldiner@fcc.gov, Priscilla Lee at (202) 418-2957, email: Priscilla.Lee@fcc.gov,

(202) 418-2957 or Tom Nessinger at (202) 418-2709, email: Thomas.Nessinger@fcc.gov.
News Media Contact: Janice Wise at (202) 418-8165, email: Janice.Wise@fcc.gov. [DA-22-1226A1.docx](#) [DA-22-1226A1.pdf](#) [DA-22-1226A1.txt](#)

While I'm dealing with FCC actions...This one should have the attention of everyone. The Washington State SECC will likely be involved, perhaps filing comments?

Released: 2022-11-23. PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ANNOUNCES COMMENT AND REPLY COMMENT DATES FOR ALERTING SECURITY NOTICE OF PROPOSED RULEMAKING. (DA No. 22-1225). (Dkt No 15-94 15-91 22-329). The Public Safety and Homeland Security Bureau announces the comment and reply comment dates for the Alerting Security Notice of Proposed Rulemaking. Comments Due: 2022-12-23. Reply Comments Due: 2023-01-23. PSHSB. Contact: James Wiley at (202) 418-1678, email: James.Wiley@fcc.gov or Steven Carpenter at (202) 418-2313, email: Steven.Carpenter@fcc.gov. Action by: .. [DA-22-1225A1.docx](#) [DA-22-1225A1.pdf](#) [DA-22-1225A1.txt](#)

If you recall there was a lot of attention paid to whether or not foreign governments (Russians etc) have been trying to sway our elections. Recently it's become clear that this is the case and, in the case of Russia, they have made it clear they intend to keep doing it. Perhaps not by trying to 'monkey' with the actual counting of votes, but by swaying public opinions on many topics. This is where a foreign power can exert themselves in this country without firing a shot.

We need to be on the look out for this kind of activity...where the interests of another country can be served via activities for which there are no laws or protections. I can imagine how these players would also work to include our radio and TV broadcasters.

The following piece should give us all food for thought.

['Weaponisation of everything': Putin's hybrid warfare exposed by hidden attacks on Europe \(msn.com\)](#)

Back when I was on the SBE Board and involved with Frequency Coordination we were working with the DOD on coordination matters that involved situations where broadcasters and military operations were discussed and resolved. Perhaps this was why this headline caught my attention?

Broadcasters And Defense Department Agree To Share Spectrum Around 26 Military Bases.

With all the military installations in the Puget Sound area, this should be of great interest to TV broadcasters in this area.

Here's the related story -

Nearly seven years of technical study, along with laboratory and field testing, have produced an agreement between broadcasters and the Department of Defense to share spectrum that is currently used by broadcasters for electronic newsgathering and other purposes. The joint memorandum of understanding between the military, the National Association of Broadcasters, and the Society of Broadcast Engineers, will mean 26 military bases will have access to the spectrum. The military will use it for activities including test and training missions that the two sides say are needed to “assure readiness” and “enhance electromagnetic spectrum superiority.”

Robert Weller, VP for Spectrum Policy at NAB, calls it an “amicable arrangement” that will ensure that there is a sustainable model for frequency allocation. “This innovative agreement between the DoD and broadcasters will enable important military communications and newsgathering operations to coexist by balancing ever-increasing demand for spectrum access,” Weller said in a statement. “America’s radio and television broadcasters are committed to collaborative spectrum usage that best serves the interests of our country and the millions of listeners and viewers who depend on us every day.”

At a number of locations, broadcasters were able to identify “home channels” – spectrum where DoD will have presumptive access, while some locations will require active coordination as is done at major media events such as the Super Bowl. To facilitate it on a day-to-day basis, the SBE has set up a national frequency management office headed by National Frequency Coordination Manager RJ Russell. His job will be to handle coordination requests between the military and broadcasters. The trade groups said that by creating a dedicated office, it will ensure that both sides have consistent analysis and response timing. Previously, coordination was handled at the local level.

“Frequency coordination is one of the foundation pillars of the Society of Broadcast Engineers,” SBE President Andrea Cummis said. “This agreement provides our partners at the DoD and the NAB and the SBE the tools to ensure the public is best served through the shared use of this spectrum.” In

addition to coordination among broadcasters in a market, Cummis said the SBE has worked with commercial groups and government agencies in the past to minimize if not eliminate interference in the limited RF spectrum available for broadcast operations.

The spectrum – at 2025-2110 MHz – was identified for potential sharing in advance of a spectrum auction that the FCC conducted in 2014 that raised more than \$44 billion by converting federal spectrum to flexible commercial use. The spectrum is presently used only by television stations, networks and content creators for video contribution. It is available to radio stations, however it is not believed any radio stations are using it.

We've witnessed a great deal of contraction and job-loss in broadcasting the last few years. Now, general economic contraction is taking its toll on jobs in the 'tech industry with the announcement that firms like Meta, Zillow, Redfin, Amazon etc are going to be shedding staff. Remember the 'dot-com' bust about 20 years ago? Here we go again.

Meanwhile when a broadcaster has a tech-opening, there are few applicants. Who knows, perhaps this 'adjustment' will help our industry?

The Weather in our area continues to set records. For example, our historic wet and stormy November- this year- featured the longest dry stretch in over 20 years. As we got to the end of the month it was time for Snow! But, NOTHING like what happened in Buffalo, N.Y. where they had an early Lake Effect snow event that piled up 77 inches of the stuff. I recall working in that area a few years ago where I observed a crew installing VERY TALL (Perhaps 8 feet) poles on fire hydrants. I asked the local engineer (Joe Fleming) what that was all about...he said so the snow plows would know where the hydrants were. That was a quick lesson in just how deep snow can get in that area.

Bottom line...We are still pretty blessed living in PNW.

I recently read a 'Guest Commentary' in Radio World where the author, Ron Schacht, suggested many radio stations are 'over-technologized and under-prepared'. This hit home as I have been preaching the same sermon for many years.

Here's the way I look at it – Modern technology is a wonderful thing...it enables us to do things that just a few short years ago would have been deemed impossible. Much of this is made possible thanks to the giant strides we have made with computers, smart-phones (add your favorite, created in the last 20 or so years here) and all the infrastructure we have created that permits them to all work together.

Those of us that work in this field have spent a great deal of time removing the old and installing the new. The demand for this transition is fierce! These new systems are 'feature rich' with what I like to call 'Bling'. Bling sells new things! Just watch a spot for a new smart phone and how they present the new things the new creation can do and work to convince you that this is the reason to purchase the new one. This does not stop with Smartphone...it extends to home appliances and entertainment systems, motor vehicles and ...of course, all manner of communications equipment.

This issue here is how we have become totally dependent on these new things and are quick to get rid of older, and in some cases, more reliable items because of their lack of 'Bling'. This is especially concerning when 'Bling' is more important than 'Reliability'

There are a number of ways to increase reliability via better design. In too many cases – "Price-point" wins out over reliability. Short-comings like this can be over-come via redundancy, but this pushes up the cost.

The importance of having a 'Plan-B' cannot be overstated, however, it's frequently ignored as dependency breeds complacency. One thing a broadcast engineer needs to do is to constantly be asking 'what would happen if something we count on, suddenly, was not there for us?

Sounds like the FCC is going to continue to 'tinker' with things in an effort to help AM Radio under the title of 'Revitalization'. I still believe they are, perhaps, ignoring the fact that many have given up on AM Radio (not to mention some auto makers that have omitted AM radios in new vehicles. The fact is, the percentage of people who listen to AM has been falling for years. The laws of 'Supply and Demand' are here to stay, regardless of what the FCC does. When there is a drop in demand, this is (Usually) and indication there should be a reduction in supply. Granted the number of AM's on the air is going down, however, I wonder if this reduction in supply is tracking the reduction in demand?

In our area, we have a couple of AM's that are on the FCC's list of silent stations – KARR in Kirkland and KZIZ licensed to Pacific (near Auburn) Then, of course, there is the move of the long silent 1480 in Lakewood to Bremerton that will silence 1490.

I still wonder how many AM's are on the air only because they are part of a group that operates profitable FM's and whether these AM's would go silent should they have to stand on their own?

FCC Commissioner Natan Simington has been saying that 'Revitalization; needs to move forward. He goes on to cite how important AM is to rural areas.

Interest, and support, of AM Radio, from a member of Congress has made the news..

Senator Ed Markey is asking the heads of the top 20 car brands to explain their vision for keeping AM in vehicles. In a letter to them he stated - **"Broadcast AM radio, in particular, is a critical mechanism for government authorities to communicate with the public during natural disasters, extreme weather events, and other emergencies,"** He reminded them how FEMA has been spending millions on upgrading AM stations (if you recall they recently did this at KIRO-AM) He added **"Despite innovations such as the smartphone and social media, AM/FM broadcast radio remains the most dependable, cost-free, and accessible communication mechanism for public officials to communicate with the public during times of emergency. As a result, any phase-out of broadcast AM radio could pose a significant communication problem during emergencies,"**

There are, certainly, a couple of factors driving this –

- European countries are moving away from AM and FM broadcasting toward digital radio systems
- Many of the new EV's create their own AM Radio interference that the makers would rather not have to address.

Markey went on to say -

"I write to urge your company to maintain broadcast AM radio in its current and future vehicles, including electric vehicles "Broadcast AM radio remains a crucial, cost-free source of news, sports, and weather, and, more importantly, is an essential medium for public safety officials — including the president — to communicate with the public during emergencies."

One good use for AM Stations is by serving those that don't speak English. The Seattle Times recently reported 'Ninety different languages are spoken in Rainer Valley alone'. Just dial around the AM band, and you will see what I mean. Not that many years ago you would never find anything but English.

With all that being said, the Seattle area has a couple of exceptions –

- Kudo's to Bonneville's KIRO-AM who proved that with the right content AM could succeed. Their recent #2 position (with help from the Mariners great run) was something that should turn a few heads.
- And to Lotus whose KNWN is ranked #5 with the areas all-news operation. Yes, I know they have a 'Rim-Shot' FM on 97.7.

Perhaps I should mention that Lotus, along with iHeart Media, have proven that call letters are not as important as content ! We all gasp when KOMO-AM died to become KNWN and when KJEB was born (They are #3). Back in the days of ratings diary's, radio had a policy of stating their call letters very often. Now with PPM's keeping track of who is being listened to, it's (obviously) no longer a big deal.

Now ...what to do with all the other AM's whose ratings are in the cellar? In a move that is not likely to help AM Radio – Sinclair Broadcast Group is now field-testing a system that can deliver audio content via Next-Gen TV.

While I'm on the topic ...A quick look at some things that got my attention from the latest Radio Ratings –

- KUOW has slid a bit, now ranked #8 where they are tied with KEXP
- Hubbard's KNUC (The Bull) is slightly ahead of Audacy's KKWF (The Wolf)

Perhaps as an indicator of how Radio, in general, is struggling is the stock price of Audacy (formally Entercom) They been, idling along, at about 30 cents per share. Now they are facing the potential of being delisted on the NYSE.

The FCC made another step forward in modernizing how they do things by allowing FM and LPFM directional antenna patterns to be verified by computer modeling. For some reason, this change has been a long time coming.

Another issue facing, not just AM, or Radio, but Broadcasting in general is how to attract new blood. SBE and others are taking note of this issue. I recall recently seeing a thread on a broadcast engineering - oriented remailer where a party posted a common that a station was looking for an engineer. The wages offered were staggeringly low. When some push-back was offered, the response was something to the effect that the cost of living is lower there. Granted, the cost of living in Seattle is very high. This leads me to ask how wages in broadcasting in the Seattle area compare to other industries and what impact this has on those that might look at broadcasting as a potential career choice?

One of the great questions in this day is –

Why is there so much mis-information on line? Now I'm not talking about those that are trying to spread some conspiracy theory...I'm talking about mis-leading things.

Let me give you an example – If you are like me, you no longer look through the Yellow Pages to find a business or service...You 'go on-line' and search. Many times my search has led me to a business that's no longer there etc.

What made me think of this?

Take a close look at the following and tell me if you see anything mis-leading ...

KING-TV

Television Station



KING-TV is a television station in Seattle, Washington, United States, affiliated with NBC. It is owned by Tegna Inc. alongside Everett-licensed independent station KONG. Both stations share studios at the Home Plate Center in the SoD... +



Facebook



Instagram



YouTube



Official site



Wikipedia

Address: 333 Dexter Ave N, Seattle, WA 98109

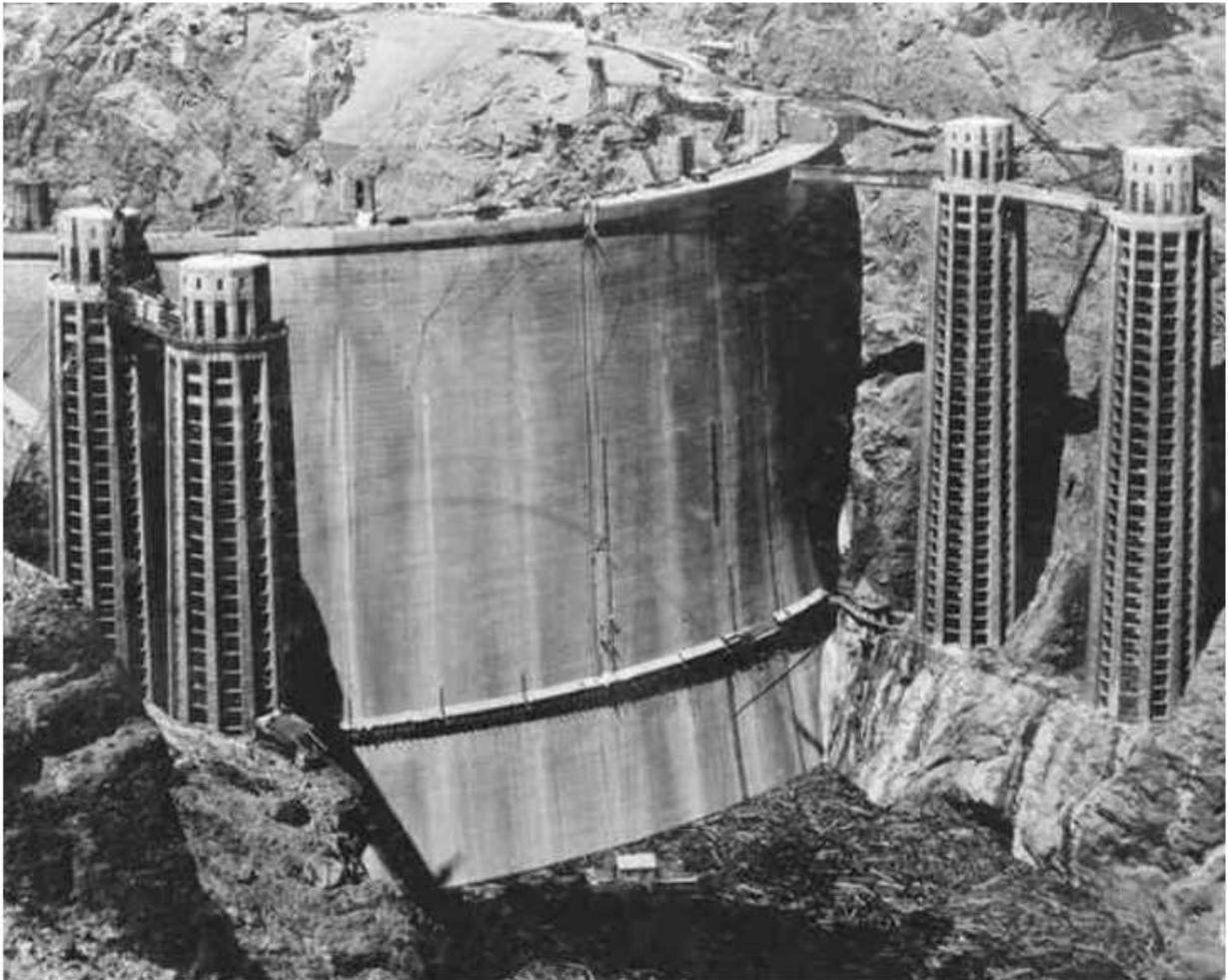
Founded: Nov 25, 1948 · Pacific Northwest

Headquarters: Seattle, WA

Are you reading for the trek to the dessert? This year will mark the 100th NAB Show.

This year the dates are April 15 through the 19th. Exhibits will open Sunday April 16th at 10 AM and close Wednesday at 2 PM. I suspect attendance will be considerably above the 53,000+ that attended last year, on the heels of the Pandemic. One trend might alter your Las Vegas Experience. Apparently, many of the casinos are considering eliminating smoking. This is sure to anger those that smoke, however, as a non-smoker. I would welcome being able to walk through one of these places while at NAB without feeling like I just swam through an ashtray.

On the topic of Las Vegas, not far away is Hoover Dam. This picture was taken before the lake filled. Ironically, the situation is coming full-circle with this same dam due to lack of stream-flow caused by mis-management of water resources by many.



If you've been in this business for a while you know there are a couple of things about Broadcasting that many citizens dislike –

- Towers. No body likes towers. Citizens will often mount a campaign to try and force their local government to prevent them from being constructed, or, in the case of existing ones, make them go away. Often this 'visual blight' will not be enough to change the minds of governments causing the objectors to dig deeper in their ammunition stash and come up with contentions that they cause cancer etc.
- RF Interference. AM stations are famous for being demodulated by any number of consumer devices – Telephones, Stereo's, Internet connections, computer-speakers etc. The FCC is well aware of this issue and had rules requiring new installation address these things during the first year of operation. Occasionally, these efforts are not sufficient to quell the objections. In some cases, local citizens insist that their local government deal with the FCC in an attempt to resolve their complaints to their satisfaction.

Thus is the situation on Bainbridge Island where KKOL has been trying to turn on what the FCC has permitted – 50,000 watts on 1300. In a rather un-usual action, the FCC is siding with the locals and has told KKOL they can't run the full 50,000 watts, but only 35,000.

The FCC's language is certain to cause many who are facing a similar situation to ask a lot of very serious questions. Here's what the Commish said -

Grant of this renewal application is conditioned upon the Station licensee: (1) immediately reducing the Station's operating power to 35 kW (which is authorized under the Station's current engineering STA) and continuing to operate at 35 kW pursuant to STA until licensed at that power;86 (2) within one month of the date of this letter, filing a modification application to permanently reduce the Station's operating power to 35 kW; 87 (3) conducting community outreach as described in the July 28 and September 29 Supplements; (4) responding promptly to blanketing interference complaints as described in the July 28 Supplement, and (5) remediating blanketing interference to any electronic device attributable to KKOL's operation, including, if necessary, installing RF filters, cables, or replacement devices. These conditions will be in effect for as long as KKOL broadcasts from the Bainbridge Island Site. Failure to meet these conditions may result in additional enforcement measures, including, but not limited to, suspension of the Station's authority to operate.

Perhaps this, historic action is part of the FCC's on-going effort to 'Revitalize' AM?

We are all seeing a tremendous push to get us to ditch our Petro-Powered vehicles and purchase EV's. There are some issues created in this process that are not fully being understood by many.

- Where is all this electric power supposed to come from?
- What about the issues where power is turned off due to lack of capacity, fires etc?
- What will the reaction be when the EV owner discovers that his cost for a 'fill-up' of electrons exceeds the cost of a fill-up of a gas or diesel powered vehicle?
- What's going to be the allocation/priority scheme when commercial vehicles (assuming they have a bigger tank (battery))?
- How many EV owners will be installing generators so they can charge their vehicle?
- Pardon my pun....But it seems to me that this matter is in Flux
- Meanwhile – Toyota continues to think that Hydrogen is a better alternative.
- Government entities are, rightfully, concerned we will be having a lot of vehicles on the road that are not paying taxes associated with purchasing Petrol (Gas and Diesel). These governments are already tinkering around with charging everyone based on the miles they drive. The EV owner is not going to escape !

Ready for a new word for your vocabulary ? **Aridification.**

Here are some definitions –

- **Aridification is the process of a region becoming increasingly dry. It refers to long term change rather than seasonal variation. It is often measured as the reduction of average soil moisture content.**
- **The gradual change of a region from a wetter to a drier climate**
- **Aridification is the process of a region becoming increasingly dry. It refers to long term change rather than seasonal variation. It is often measured as the reduction of average soil moisture content. It can be caused by natural or anthropogenic means such as climate change, reduced precipitation, increased evaporation, lowering of water tables or changes in ground cover. Its major consequences include reduced agricultural production, soil degradation, ecosystem changes and decreased water catchment runoff.**

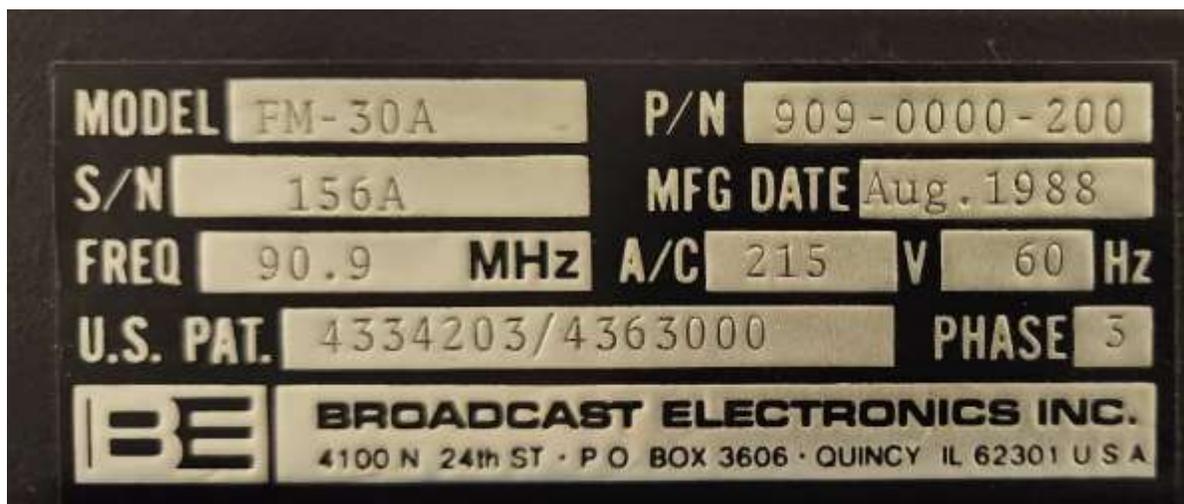
Here's a link to some more - [Climate change and the aridification of North America | PNAS](#)

Speaking of Arid – If the climate in this area is bugging youand you are Looking for a job where the sun shines a lot?

[Broadcast engineer | KJZZ](#)

As many of you know, many broadcast stations are operating with very old transmitters.

Here's the ID Tag of a stations transmitter in our area that operates 24/7/365 –



My question is this –

Are there any stations in this area that are operating one that's older?

If so, please drop me an email and let me know

I love pictures of unusual transmitter sites – This one certainly fits that category



WUMB's tower on top of this stone tower.

Here's a picture of a rather unique FM Broadcast stations transmitter



The transmitter (the item with the Blue Handles) is a Rohde and Schwarz – Liquid Cooled unit operated by KSOS in Las Vegas Nevada. They run 100,000 Watts on 90.5 from a site 387 meters above average terrain and serve the Las Vegas Valley with a Contemporary Christian Format

A look at a broadcast transmitter site that very few have ever heard of – in this case – Striped Peak located West of Pt Angeles, right along the Strait of Juan de Fuca. This site is home of two FM Stations – KVIX, operated by KNKX, and KNWP operated by NWPB. The antennas for these stations are located, one above the other on the big self-supporting tower.

In this picture, taken in late November, you can see the recently logged little peak and the access road going up the side.



The little short towers located to the left of the big tower belong to the FAA. Striped Peak is located not far west of Fairchild Airport that serves the Port Angeles area.

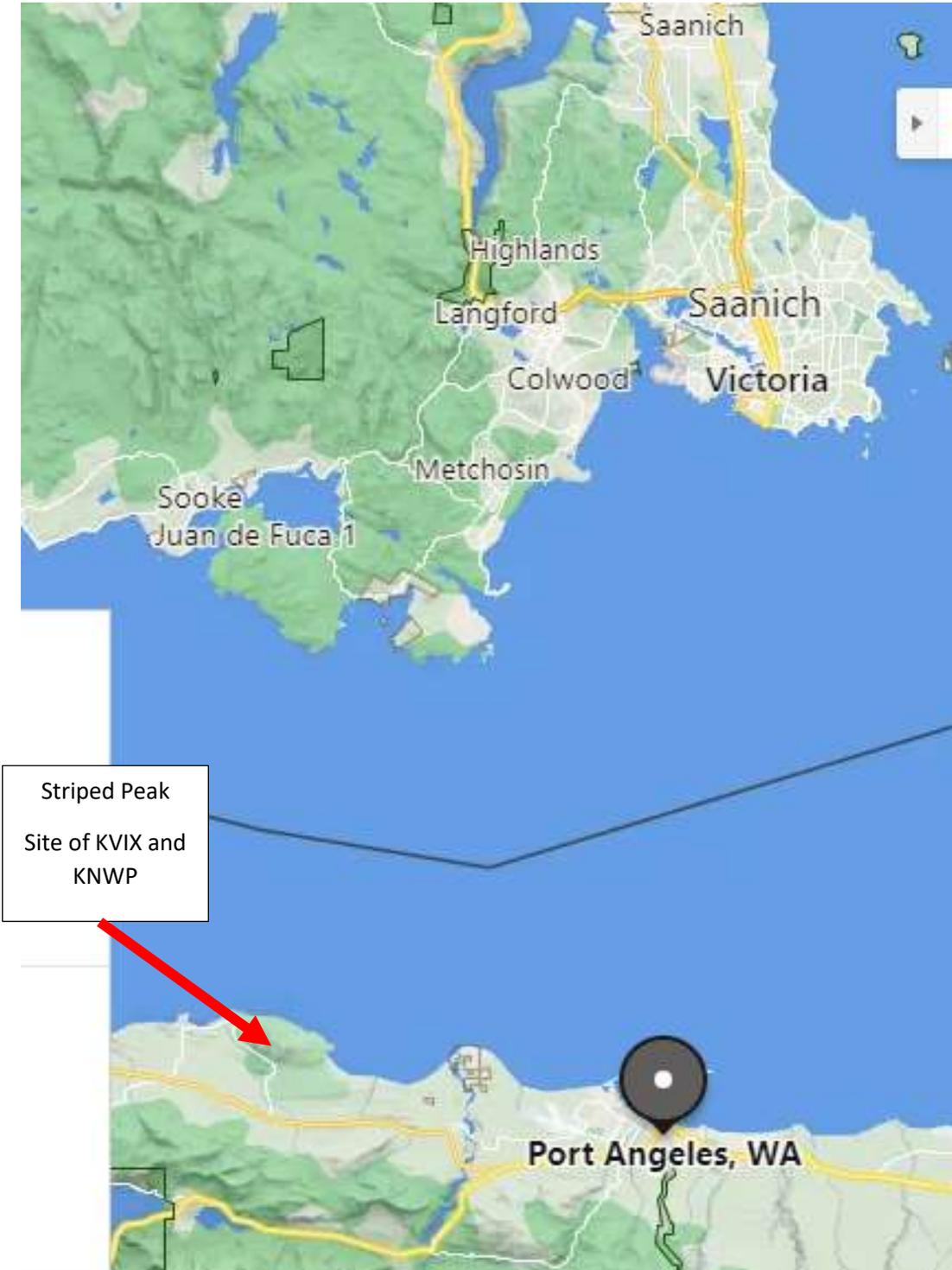
Looking East, through the fence at Port Angeles. The steam is from the Paper Mill.



Here you can see the area in the above picture on a map – The skinny piece of land is called Ediz Hook.



This map shows the relationship of Striped Peak to Port Angeles and the city of Victoria located on Vancouver Island where both of these stations have many listeners.



Pretty Picture time – First off, a pretty sunset from my perch on Auburns East Rim



And a nice shot of Mt Rainier



Nice, close to setting sun, from one of the AccelNet cameras at West Tiger on Nov 9th



Another sunset from my house with some interesting vapor trails.



This is the road between the two Broadcast Sites on West Tiger. Only traffic has been on foot.
Taken on different days



In the event you are wondering – As of Dec 3rd – The only way to reach the broadcast transmitters on West Tiger is via an 'over the snow' machine....or, on foot via snow-shoes.

This one was contributed by Jason Royals of the NWPB – KNWO Transmitter site at Cottonwood Butte, Idaho. Elevation 5730 feet. The stations transmit antenna are the two Brown devices on the tower on the left.



In the event you are wondering – Cottonwood is located South East of Lewiston, Idaho



A snowy early December sunset from my back deck



My Column would not be complete with out a scene from Dwight Small



This one will make you think.....

**Have you ever noticed that
all instruments searching
for intelligent life...**



**Are pointed away
from Earth**

As will these -

**The irony for mankind
is that a computer
program asks a human
to prove that they're
not a robot.**

**WHY DO EGGS COME
IN FLIMSY STYROFOAM
CARTONS AND
BATTERIES COME IN A
PACKAGE ONLY A
CHAINSAW CAN OPEN?**

Hope to catch you here next yearIn the mean time
Merry Christmas and Happy New Year.

Clay, K7CR, CPBE

SBE Member # 714

Since March 1968