

## **May 2021 - Clay's Corner**

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

The middle of April we received what I often call our 'April Teaser', a long period of warm and wonderful weather. In this case, featuring temperatures that were 20 degrees above normal. Just enough wonderful weather to make many feel that summer has indeed arrived. Just to re-enforce the notion, there was a wildfire near Black Diamond, east of Auburn. This is just a 'sampler' to help us forget the days of overcast and wet. This time around we did set some records for the two-week long April dry-spell. Remember, in this area, summer often will begin after the heavy rain on the 4th of July.

Make it three AM's that are making their move to all digital broadcasting. The latest to make the change will be WFAS located in White Plains, north of NYC which has announced that starting on May 24 their AM will become Digital.

"Once WFAS has switched to an all-digital operation, only radios equipped with HD radio technology will be able to receive and play the station programming." WFAS explains to listeners in a posting on its website, "WFAS will no longer be available on analog-only AM radios. Broadcasting in digital will eliminate annoying static and interference, improve the sound quality to equal FM radio and streaming and extends the range for clear reception."

What makes this situation a bit unique is that WFAS does not have a companion FM Translator so that listeners with 'conventional' AM/FM radios can continue to listen. Their on-line stream will continue as usual.

Prior to this change, WMGG in Tampa-St. Petersburg made the switch, back in January of this year. Here, the former AM station is simulcast on an FM frequency in addition to having a translator on the former AM. Word is now that another AM in the Tampa-St. Petersburg market is about to switch also.

Prior to these changes, the only Digital-only signal on the AM Band has been Hubbard Radio's WWFD in Frederick, MD.

I have to admit that I'm a bit frustrated by those who insist on calling this – 'Digital AM'. I have a couple of gripes:

#1 – We need to come up with a universally agreed label for these AM stations that switch to all-digital to avoid further confusing listeners. Whereas many new HD receivers can receive them, perhaps a station making the switch would change from KRUD-AM to KRUD-HD? Perhaps a more correct term would be Digital Medium Wave or DMW, but that violates the '2-letter' designation rule (AM, FM, HD, XM, TV etc.)

#2 - There are those who refer to the process of changing from AM to Digital as a 'chicken and egg problem', saying that you must have demand before it would be worth building.

If you have been in this business as long as I have (60 years on August 1 of this year) you will recall the VERY SAME argument used for FM.

I was the engineer of a station back in 1966 and tried and tried to convince the owner of the station to get an FM frequency (back when you could). He had the same argument. As years went by, he - FINALLY - came to understand after it was too late for him to afford to buy one. He ended up selling his AM station for a fraction of what FM's were going for.

History is full of examples of this argument. We have one of them operating here in this area. Major retailers were convinced that selling things on-line was fine for that little book store in Seattle but not for them. It appears that Amazon was right and they were very very wrong!

Those who are willing to chart new territory (with their money) should be applauded for their courage and foresight. Where would we be if every new product had to wait for 'demand' before investing in the future?

From Kent Randles in Portland, we recently learned that 1330 KKPZ, Portland has filed for Silent Special Temporary Authority - looking for a buyer. Perhaps another indication of the health of AM Radio? KKPZ operates with 5,000 watts full-time and has good coverage of the entire Portland/ Vancouver area. Yes, the station also has an FM translator.

On the personal side, I remember listening to 1330 when I was a kid in PDX. In those days the call letters were KPOJ, which stood for the Portland Oregon Journal, a daily newspaper back then. The station has a rich history going back to when it signed on in September of 1925. One of its early call letters was KALE which you will find on old radios from that era. The call letters, KALE, later showed up in Tri-Cities.

Perhaps someone will purchase this historic station and put it back on the air running Digital?

[https://licensing.fcc.gov/cgi-bin/ws.exe/prod/cdbs/forms/prod/cdbsmenu.hts?context=25&appn=101825618&formid=910&fac\\_num=4113](https://licensing.fcc.gov/cgi-bin/ws.exe/prod/cdbs/forms/prod/cdbsmenu.hts?context=25&appn=101825618&formid=910&fac_num=4113)

The U.S. Supreme Court backed the FCC allowing relaxed rules regarding media ownership limits. Now we will have to wait and see what this means in terms of acquisitions, mergers etc. This change also impacts long standing rules regarding common ownership of newspapers and broadcast stations. Considering the present state of print media these days, I don't see this as having a big impact.

If you are old enough, you remember when Color TV came along. Back in those days, about the only way to receive TV was via an antenna. Yes, there was TV before Cable and Satellite!

The makers of antennas jumped all over this opportunity to sell the masses new antennas implying that you needed a new antenna to get proper Color TV.

Well....Guess what? It's happening again, this time with HD Radio. Winegard,

perhaps sensing that this HD Radio thing might be something they should incorporate in their marketing, are doing so with a new model. I copied this from the Amazon site recently. Technically, it's a pair of crossed dipoles. You can have one for about 30 Bucks.

### Winegard HD-6010 HD FM Radio Antenna



No....You don't need a special antenna to receive HD Radio... 😊

Look closely and you will notice that the connection appears to be balanced. Perhaps they expect you to use 'Twin-Lead' ...or perhaps a balun and coaxial cable?

**SAY GOODBYE TO ENTERCOM**



**Entercom**

**AND HELLO TO AUDACY**



If this news item had been released a day later, I would have suspected it was a spoof. However, on March 30th it was announced that Entercom is rebranding itself as 'Audacy'. If nothing else, such a change will attract some media attention. The firms that supply business cards and letterhead will be pleased. David Field, the President and CEO of the firm said this about the change:

**"We have transformed into a fundamentally different and dramatically enhanced organization and so it is time to embrace a new name and brand identity which better reflects who we have become and our vision for the future."**

For a long time we have referred to the company by its 'Ticker Symbol' – ETM. That too will be changing to 'AUD'. I'm sure that many will feel this is an 'odd' move. (Sorry, could not resist.)

Others have commented that they had the 'audacity' to make the change.

While on the topic – Entercom....uh...Audacy, has an opening for a Staff Engineer in San Francisco where they have a seven station cluster. For more info:

<https://entercom.avature.net/careers/JobDetail/Staff-Engineer/15650>

I sent a note to the local Chief, Phil VanLiew asking if this changed his email address as well...

Yup ! - That is correct: [phil.vanliew@audacy.com](mailto:phil.vanliew@audacy.com)

At least for awhile, there is more than one Audacy. If you Google it, you will come back with:

- > [Audacy Wireless Controls - Intelligent Lighting - Products \(creelighting.com\)](#)
- > [Audacy - Crunchbase Company Profile & Funding](#)
- > [Audacy - Spaceflight](#)
- > [Working at Audacy | Glassdoor](#)

Apparently having several different users of the same name is not an issue. Betcha that would not be the case with names like – Amazon, Boeing, Microsoft etc.

If you just Google Audacy to see what it means you get – Audacity.

There are a lot of things these days that share names. For instance: If you went into a pet store and asked for a KONG, they would know exactly what you wanted. Perhaps never giving a thought that KONG are call letters for a Seattle TV Station.



In last month's column I wrote about how the ubiquitous XLR connector was introduced before Pin 1 had become the standard for Ground. This quickly generated interest in the form of the following email:

**I was just reading your column. Did you know that, on XLR's, pin 1 is longer on the female, so it mates first? It's why you don't get a buzz when you plug an XLR into something. Someone at Cannon was pretty**

smart.

Taking this line a step farther, an RCA ribbon is the one type of mic that you'd better not plug in with phantom power turned on. Some of them have a grounded center tap on the output transformer, which is a rare thing. If pins 2 and 3 don't mate at exactly the same time, which they are unlikely to do, DC current flows for that instant, causing the fragile ribbon to experience magnetic force with an unhappy result.

**Lowell Kiesow**  
**Chief Engineer**  
**88.5 FM KNKX • Jazz24.org**

Perhaps you never thought about Airbus having an airplane with that name?  
(Look closely.)



**A321XLR\*** Xtending the A321neo success:  
Unbeatable fuel efficiency now flying Xtra Long Range

up to **4,700 nm / 8,700 km**

**+15% range** **+15% range**

**A321neo** **A321LR** **A321XLR**

**180 - 220** Typical Seating  
2-class

**AIRSPACE** cabin

**A321neo** unbeatable economics  
**-30%** fuel burn per seat\*

What is an A321XLR?  
MTOW **101t** | **Rear Centre Tank** & optional **Additional Centre Tank**

\*vs. previous generation competitor aircraft per seat

**AIRBUS**

Do you remember? The first operational transistor was declared 70 some years ago, on December 23, 1947! The transistor is probably one of the most revolutionary components ever invented. I started experimenting with them in the late 50's. I still have a Raytheon CK722 in it's original container! It was a germanium PNP. My first NPN was a 2N35. I recall building a transistor radio in a small plastic box while in high school in 1956. I used it to listen to the

World Series, creating quite a stir back then. (Yup, getting old!)

If you recall, Congress adopted some new ways to deal with pirate radio. They increased the fines to as much as \$2 million while the Commish said it would be going after landlords, advertisers and any other business that does business with pirates. All this was to go into effect on April 26th. Now we will see if there are any new enforcement actions. The methods of the FCC will likely involve what are called 'sweeps' in major cities where the practice is more common. It's been a while since I've run across a pirate operating in the Seattle area. Targeting landlords may prove to be more successful, as many of the pirates cite the lack of ability to pay and are let off the hook.

Every so often you run across a comment made by someone that brings a chuckle....**\*If you only have two ducks, they will always all be in a row.\***

Bonneville-Seattle (KIRO AM/FM and KTTH) has announced that Josh Harstad is their new Chief Engineer. Previously Josh worked for Hubbard and CBS in Seattle. More recently he has been working in Denver. Whereas this area is home, I'm sure he's happy to be back

On the Covid-19 front: Despite having a number of vaccines for this terrible pandemic, we still have a lot of bad news. Here are a few snippets:

- > On the 18th of April the world-wide death toll surpassed three million.
- > Total global infections are over 140 Million.
- > The U.S., Brazil and Mexico lead the world in Covid-19 deaths.
- > A very large percentage of people say they are not going to get the vaccine, citing their lack of trust in the process. Perhaps fall-out from the fact that the issue became politicized?
- > The blood clot issue with the J & J vaccine only re-enforced the never-vacciners.



> Voluntary compliance measures have apparently failed to stop the spread of variants.

> Now, younger people, who perhaps thought Covid-19 was an old-folks disease, are getting hit hard.

> We are being warned that we are losing the race between vaccinations and infections to the point that health officials will have no choice but recommend that we, again, tighten restrictions.

> The term '4th Wave' is based on solid evidence. Unfortunately, this is not going down well. It's easy to blame government and hard to blame our own behavior.

> There is a lot of debate, and push-back, for the idea of having some sort of vaccination verification system. Meanwhile major segments are doing just that with their vaccination requirements.

> Several major schools have announced a policy requiring vaccination for admission.

> Perhaps the most sobering is this fact - "It's a mistake to think that we're going to get to COVID-zero. This is not an eradicable disease." Read more here - [U.S. COVID-19 cases will dip in summer, rise in winter, experts say | Science News](#)

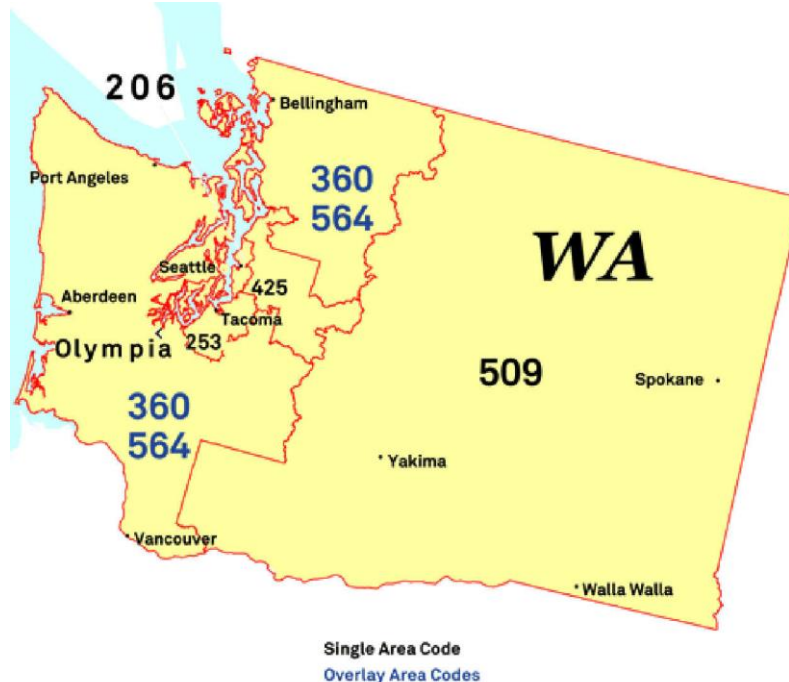
> Number of reported Washington coronavirus cases is now over 400,000. Thus far 5,474 have died and 22,111 people have been hospitalized in the state due to the virus. 28.86% of Washingtonians have been fully vaccinated.

> Washington State University will require proof that students and staff are vaccinated against COVID-19 before they return to live or work on campus. WSU is the state's first public university to announce vaccine requirements. Two private universities have made similar announcements, and other higher education institutes may follow suit. The big question, will this requirement spread to private industry, i.e., broadcast stations?

The Pandemic has caused many of us to increase our vocabulary via the introduction of new words and phrases, for example 'Mask Up' or 'Social Distance'. One of the down sides to all of this has been our ability to understand others...especially when they are wearing a mask and behind a large sheet of plexiglass. Another problem is reading a person's reactions and/or expressions when they are wearing facial covering. This brings me to a new word for your vocabulary, 'smizing' which means smiling in a way that's visible in your eyes.

Another look back (and ahead): Remember when phone numbers had less digits and they had a 'prefix' that was a word. I recall my phone number when I was a kid in Portland to this day, Webster-1265. How about this one .....SUnset 3-2404? Then along came Area Codes and direct long-distance dialing. To start with, just about everything in the Seattle area was area code 206, Oregon was 503 etc. As the area codes ran out of numbers they added more area codes. Outside of Seattle became 253 or 360. Back in those days you could tell where a call was coming from by the first 3-digits, or numeric prefix. That worked for awhile, then it was determined that they needed to shuffle the deck and do what they called an 'overlay' that would permit the phone companies to use any Area Code, anywhere in the area. This was the end of 7-digit dialing. Going forward, you would have to dial 10 digits to call the person across the street.

You'd think that with the reduction in the number of 'Land-Lines' that there would be plenty of excess phone numbers these days. Guess again! Apparently the 360 area code is running out of numbers and, once again, it's time for another area code. This time, it will be 564. Like the others, this will be an overlay. We are told that eventually 564 will be used in the Seattle metro as well. So don't be shocked if your new neighbor calls you and your caller-ID shows a 564. It's just a sign of progress. By the way, this is our state's 6th area code. The following map shows how this will work:



This map certainly underscores the population distribution in the state. Look at the percentage of Washington that still has only one area code.

Here's a great word that we don't use very much in common-speak – KERFUFFLE – a word beginning with a 'K' that makes sense.

Here are some definitions I scrounged:

> A kerfuffle is some kind of commotion, controversy, or fuss. If you read about a scandal in a newspaper, it could be described as a kerfuffle. Kerfuffle is a humorous-sounding word for a mostly non-humorous situation: some kind of disturbance, scandal or mess.

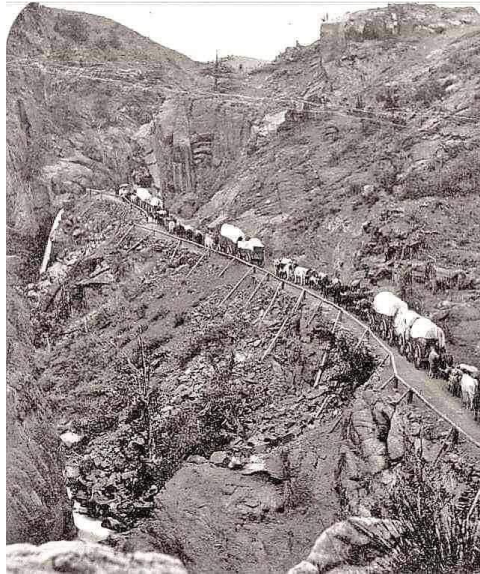
> A commotion or fuss, especially one caused by conflicting views.

The root of “kerfuffle” is the very old Scots' verb “fuffle”, which first appeared in print in the early 16th century and means “to throw into disorder.” The Oxford English Dictionary suggests that the “ker” part of “kerfuffle” may have come from the Gaelic word “car,” meaning “to twist, bend or turn around.

Yes, I do maek mistrakes.

I recently ran a picture that was sent to me by a friend in Arizona in response

to my mentioning to him that Snoqualmie Pass was getting a lot of snow this year.



'Eagle-Eye' Tim Schall (Transmitter Engineer at KING/ KONG-TV) Sent me this note:

**Clay:**

**Greetings from TV land.**

**I am currently enjoying your April 2021 'Clays Corner.' However, the picture your friend living in Arizona shared with you is not, in fact, Snoqualmie Pass. It had been, and it seems still is, circulating on various social media sites as several different mountain passes. It is, in fact, "...just North of Manitou Springs, going towards Ute pass, Colorado, along what's now US 24."**

**I refer you to the Facebook page of the Snoqualmie Valley Historical Museum:**

**<https://www.facebook.com/SnoqualmieValleyMuseum/photos/a.225637984131655/4272448902783856/>**

Be sure and take some time browsing this site, a lot of fascinating pictures of days gone by.

Looking at the picture again, shouldn't Snoqualmie Pass have a lot of big fir trees in the shot? Appears that I fell for it. I apologize for not spotting the error. Thanks Tim. Good catch.

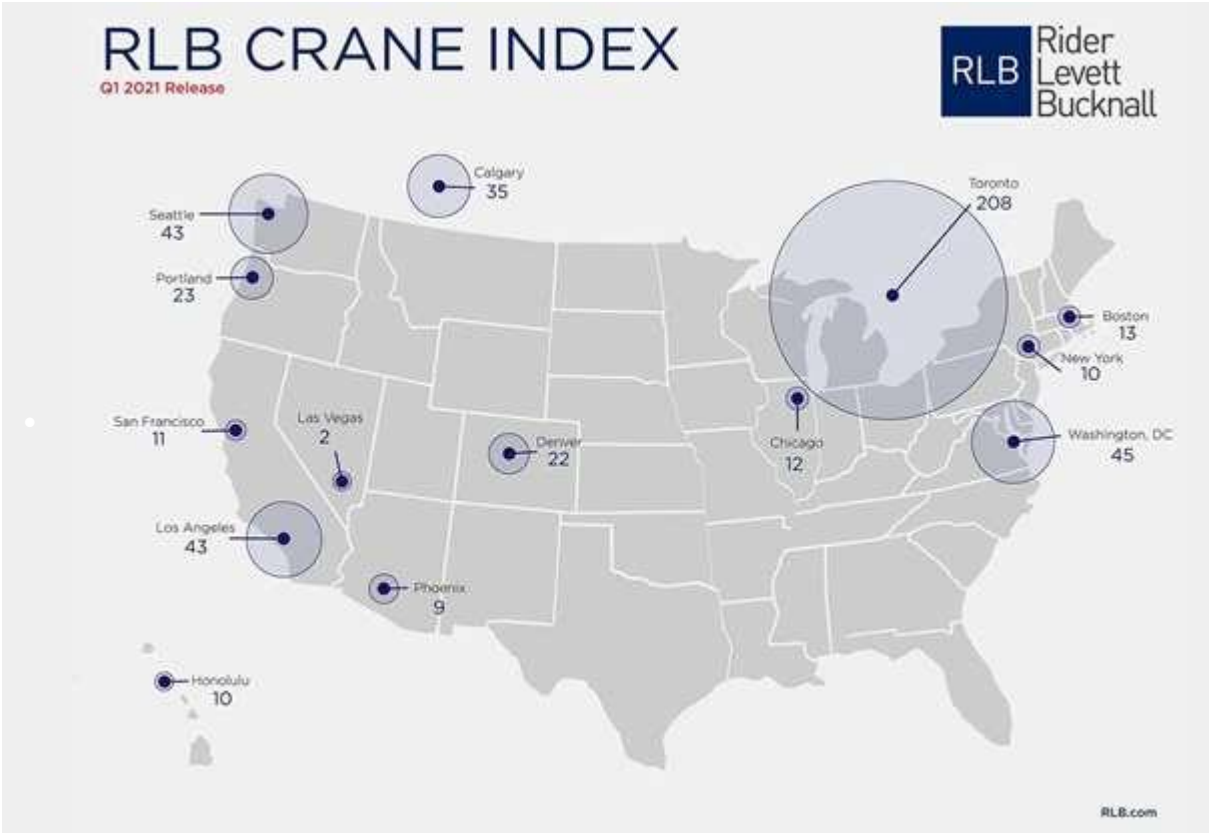
Here's a word to add to your broadcast term dictionary, Trimucast. We all know what to call a common program aired on two stations in a market, Simulcast. Trimucast is the term for when it's aired on three stations. (At least according to one source.)

I recently chatted with Terry Spring who informed me that he is going to retire effective June 1st. Terry has been the Chief Engineer at the local Ion Media (now Scripps) TV station for many years. The writing is on the wall – I'm going to have to knuckle under and join that club, sooner or later. The fact is I am winding down. It's just very hard to say goodbye to those who you have been associated with for many years.

Another retirement to mention this month. Tom Saylor is retiring from the Engineering Department at WSU's NWPB in Pullman. I've had the great privilege of working with Tom for over 11 years and that we've shared the same employers. He is leaving some extremely large shoes to fill and will be missed by many.

For many years, when it comes to building radio or cellular towers, the term NIMBY, which means **Not In My Back Yard**. When it comes to things that are underground there is NUMBY...**Not Under My Back Yard**. Then there is BANANA ...**Build Absolutely Nothing Anywhere Near Anyone**. 😊

For the second time in the last year, Seattle has been eclipsed as the crane capital of the United States. But who beat us this time around might surprise you.



Construction consultant firm Rider Levett Bucknall (RLB) released a glimpse of their biannual Crane Index rankings of all North American cities for the first quarter of 2021 yesterday, and found that Washington, D.C. now leads the nation for the most cranes at 45.

But Seattle wasn't far behind, tying for second with Los Angeles with 43 cranes each. Los Angeles had previously inched forward to beat the Emerald City in the count last year at the beginning of the pandemic, and the new findings show that the two West Coast cities are still neck and neck.

But look at Toronto - WOW!!

Seattle didn't add any cranes since the last report issued in September 2020. Residential construction projects still amount for a majority of the cranes in Seattle followed by transit work, according to the Daily Journal of Commerce. Seattle has also slipped in the rankings of hot housing markets from #1 to #2. The new leader is Phoenix with San Diego at #2.

Travel Trivia will occasionally send me something that I am compelled to follow, like this one: "Rainiest States in the U.S." If you have lived in this area any length of time you have likely run across someone that wonders how you could live in a place like this with all the rain, etc.

So how does Washington stack up compared to other states? Georgia (50.22 inches) - Hawaii (50.33 inches) - Tennessee (51.85 inches) - Florida (54.73 inches) - Alabama (56 inches) - Mississippi (56.48 inches) - Louisiana (59.15 inches).

Washington State was not even close. Of course, thanks to the Cascade Mountains, a good portion of the Evergreen State is 'Everbrown'.

So what's the rainiest city in the U.S.? Mobile, Alabama with an average rainfall of 67 inches and 59 rainy days per year.

Now about Seattle: On average, we get 38 inches of rain per year. Interestingly, the U.S. – AVERAGE – is 38 inches. Our reputation comes from the fact that we have – more days – with rain, or, more-frequent rain...but less total amount of the stuff.

Now with that behind us, how about our neighbor to the North? What's the rainiest city in Canada? Here's what I found:

<u>Location</u>	<u>Annual Inches</u>	<u>Annual mm</u>
Abbotsford, British Columbia	60.5	1538
St. John's, Newfoundland	60.4	1534
Halifax, Nova Scotia	57.8	1468
Vancouver, British Columbia	57.3	1457

So why does it rain more in Vancouver than in Seattle? Just like the Cascades make Eastern Washington dryer, the Olympic Mountains to the West of Seattle provide a shadow on their east-side. This is demonstrated by the fact that Olympia receives 53 inches per year and Aberdeen gets 76 inches. The Olympic rain-shadow is well demonstrated in Sequim where their annual rainfall is only 16 inches, about the same as Los Angeles, California.

Ever wonder about the, perhaps, over-use of the word 'Mount' in a city name?  
Example:

Mt Pleasant, Texas – Elevation 404 ft  
Mt Vernon, WA – Elevation 180 ft

The FCC periodically publishes a list of station totals. This time around, surprisingly, the FM Station total is down...and, as expected, the number of AM's is down as well with that total approaching 10% less than there were in 1990. As you might expect, the number of FM translators and boosters is up 30% from five years ago.

For those of us living in the Seattle area, we are very close to the best country in the world!

For my readers in Canada, you are living in it!

This all according to a Best Countries report in U.S. News and World Report's annual rankings recently released. Canada ranked #1 in Quality of Life and Social Purpose and is seen as a stable and safe society in which individuals can develop and prosper and is open, fair and equitable.

Here are the rankings from their survey:



## The Top 10 Countries in the World:

1. [Canada](#)
2. [Japan](#)
3. [Germany](#)
4. [Switzerland](#)
5. [Australia](#)
6. [United States](#)
7. [New Zealand](#)
8. [United Kingdom](#)
9. [Sweden](#)
10. [Netherlands](#)

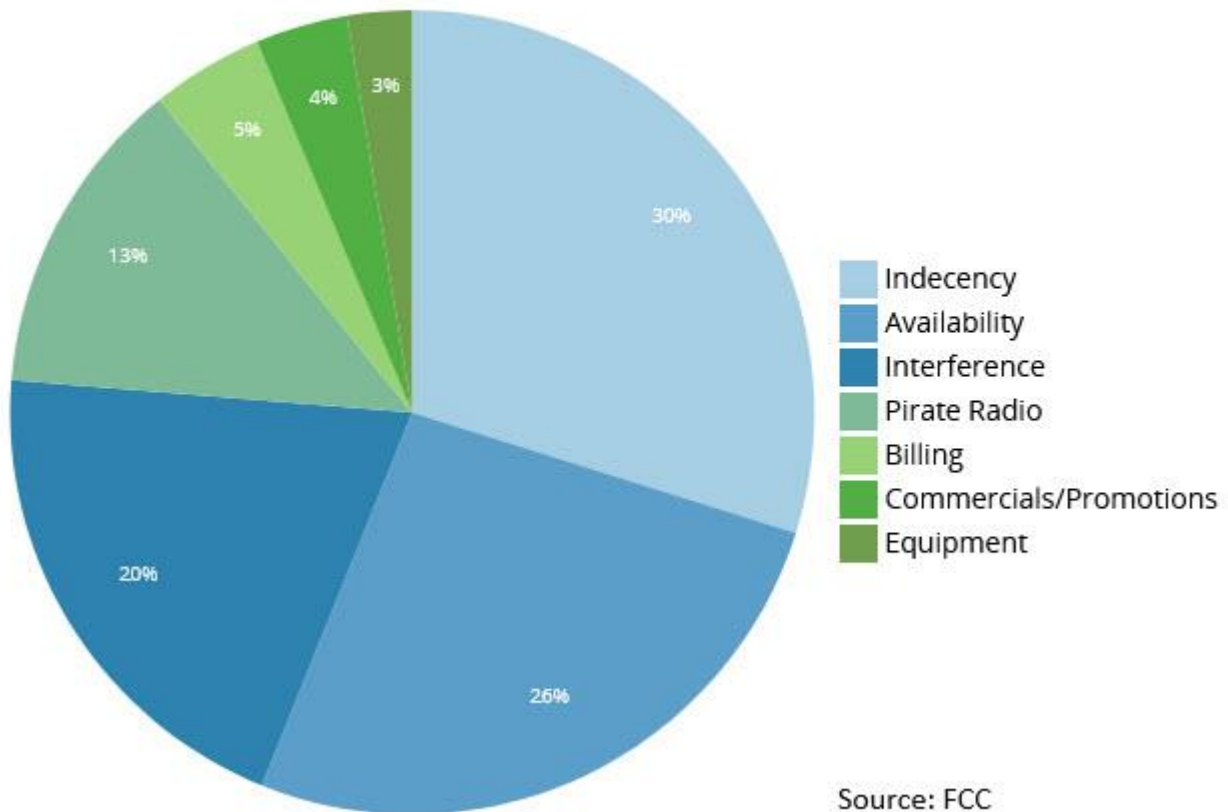
## The 10 Lowest-Ranked Countries in the World:

78. [Iraq](#)
77. [El Salvador](#)
76. [Serbia](#)
75. [Belarus](#)
74. [Lebanon](#)
73. [Uzbekistan](#)
72. [Kazakhstan](#)
71. [Ukraine](#)
70. [Oman](#)
69. [Guatemala](#)

You'd think that with all the political news and a pandemic that indecency would not be a big issue, but it was. In fact in 2020 the FCC had more than 1,000 indecency complaints filed. Interestingly many of them were related to pirate radio broadcasters. Apparently, some of these folk's broadcasts are offensive. Overall, the FCC had some 4,768 complaints about Radio last year.

Here's a chart showing what people had a beef about Radio:

## Complaints Filed With FCC About Radio In 2020



Time to, once again, take a look at the 6+ Radio Ratings for Seattle-Tacoma.

- > Hanging on to the #1 spot is KIRO-FM, with KISW close behind.
- > At #3 is KUOW.
- > Surprisingly little KEXP is now #4. Perhaps proving that you don't need a big signal to be popular?
- > KOMO-AM is hanging in there at #5. Granted they do have an FM that may well be helping.
- > HD-2 signals from KING-FM and KNKX are both listed this month.

In a past Column I mentioned the total audience share of the top Radio stations in the News/Talk segment. San Francisco (Market #4 with 6.7+ Million) has a couple of interesting market leaders. At the top is a Non-Commercial station (KQED-FM) with a 10.6 share. #2 is KCBS-AM with a 7.5. That's an 18.1 share between them. Yes, you read that right...the #2 station is an AM!

In past years, for my April Column, I would talk about our 'annual trek to the desert' for the NAB Convention. Obviously the Pandemic got in the way last year, and will again this year. In it's place NAB will, however, be hosting a bit on-line/ virtual event April 12-23 for a number of award presentations and new product launches. This will include a deep-dive into HD Radio. For those of you who long for an in-person show, that will be Oct. 9-13 at the Las Vegas Convention Center. The Radio Show will be at the same venue, Oct. 13-14.

Perhaps you can explain the connection? Since the start of the pandemic, UFO sightings are up 50% in the U.S. and Canada. When local TV Stations show images of UFO's – That will be big news.

Here's one of those interesting questions you see pop up on-line. **What salary do you need to live in Seattle?** The answer is \$72,092.

If you rephrase it and ask, **what is considered a good salary in Seattle you get** - A person working in Seattle typically earns around 100,000 USD per year.

How about - **What is the average annual pay in Seattle?** You get this:

Top Earners - \$97,704

75th Percentile - \$80,334

Average - \$66.834

Not sure what to make of all of this, but it is interesting. What we do know is Seattle is an expensive place to live and if you want to live there, your income is a big factor.

One economic indicator that's doing well is home sales, with some areas showing around 30% increases over last year. I recently received a note from Zillow that showed my house value increasing over 32% in the last month!

Back in the early 90's, engineers from the various FM stations at West Tiger would routinely have a lunch meeting at a place in Kent. They had a conference room that we could use, good food and coffee and it was not too far out of the way. Over the years, and especially after consolidation, the routine was discontinued. In later years, I would meet friends there for lunch etc. Apparently they are one of those places where the Pandemic and its shut-downs was the last-straw. Mitzels in Kent is no more. Even the signs were removed from the building.

Old guys love looking at pictures of things that are not as old as they are. For example:



And a classic groaner from Dwight Small...Yep, Spring is right around the corner.



*Do you remember when...*  
**TV stations played the national  
anthem every night?**



Guess who?



None other than Allen Hartle. Nice to see others with beards that color. 😊

Anyone old enough reading this column remember when Allen was the Chief at KZOK?

So what do automakers and computer makers have in common? They both use computer chips. Was not that long ago that car makers did not have any computers. Now, most have several. The fact is everything today employs 'chips', vehicles, computers, TV's, household appliances...and the list goes on. So what happens when the demand for the little critters exceeds supply? Makers of these products have to slow down producing them to match the supply.

Recently Apple announced the chip shortage would (are you ready for this?) take a bite out of Apple and make it harder for you to get that new device. Likewise, some automakers are being forced to shut down production lines awaiting delivery of these little critters. Likely you would not purchase a vehicle these days that did not have them, as in days of old!

The FCC recently released an NPRM that will make a number of changes to the EAS. Some of this is designed to institute changes whose need was brought to light in the fall missile attack on Hawaii a few years ago. The Washington SECC responded to this action. If you are wondering what we had to say, you can find our filing on the FCC's Web Site. We will likely also discuss this in the next SECC meeting on May 11th at 9:30 a.m. These bi-monthly meetings are open to all and are held via Zoom. Invitation and agenda are posted on the EAS-WA Remailer.

That's about it for this month, my friends. Lord willing, I will be back next month at most of the usual locations.

Until then, get vaccinated, stay safe and continue to wear your mask...and that means cover your nose too. The 'All-Clear' is getting closer.

Clay, K7CR, CPBE  
A SBE Fellow  
SBE Member # 714  
Since March 1968