

## **Clay's Corner for June 2023**

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

This weather this early is unusual. The Seattle Times reported that it's only gotten in the high 80s six times in the last 75 years.

I took this one from West Tiger looking at Mt Rainier on May 15<sup>th</sup>. The forecast was calling for Thunderstorms later in the day.



This May is going into the record-books as one of the warmest on record. In the 67 years I've lived in this area, I don't recall weather like this. Generally, May and 'Gray' go together. As the month drew to a close – the forecast called for nothing but dry weather. My lawn is already asking for water!

Changes Dept –

Jeff McGinley

- Was – Chief Engineer - Audacy - Portland
- Now – Director of Engineering- Summit Media- Birmingham, Alabama

Josh Harstad

- Was – Chief Engineer – Bonneville in Seattle (KIRO-AM/FM & KTTH)
- New- Chief Engineer – Alpha Media- Portland

Alex Brewster

- Was – Field Service – Gates Air
- New - Chief Engineer – Bonneville in Seattle (KIRO-AM/FM & KTTH)

Looks like the Tegna Standard-General merger is off. Apparently too many objections from regulators? Tegna owns KING and KONG TV in the Seattle Market

A little over 24 years ago, one of the first, large scale, fears about Computers was a hot topic. This was, of course, Y2K. Now we have a new fear about how computers are getting smarter to the point that they could be able to think for themselves. Today, the news is full of talk about 'AI'. Perhaps you recall 'Hal' in 2001' in a Space Odyssey from 1968? In this famous film a computer named 'Hal' (actually Hal 9000) was able to take over. Seems to me there are a lot of that kind of thinking going on now.

One of the fears is that computers are now able to replicate things to the point that you can't tell whether it's true or, computer generated fiction. I can fully appreciate this, especially in light of the revelations that Fox was lying to their viewers and millions were believing it.

Hal was, finally, shut down by a human (Dave) who started removing its modules. Perhaps we humans need to make sure there is a 'panic off button' that the machines we create cannot override?

In the meantime, reflect on how the early 'Text Readers' used by the National Weather Service sounded and consider how far we have come.

Certainly, with all advances in technology, there will be those that will be putting it to work for their own gain at our expense. The problem is, as this stuff gets better, more and more are going to be fooled. As Fox has taught us...It does not take computer-based AI to fool millions, even people can do it quite well.

Certainly, one place where there is growing concern is in the area of copyrighted content and the spread of misinformation.

Audacy, owner of about 230 Radio Stations in 48 markets....Including a cluster of stations in Seattle and Portland...is, financially, struggling. Their 'financials' look bad and the Market reacted by driving down their stock price to the point that the NYSE has officially delisted them , at the end trading at about 10 cents a share.

Their First Quarter Revenue was down 5.7%, Expenses up 1.9% and earnings down 86%. They reportedly lost almost \$36 Million in the first quarter of this year.

Those that analyze these things are saying that Audacy is trying to 'Thread a Needle' and that 'Restructuring' remains possible. The company has already sold off a number of stations to raise cash, with reportedly more to come, as they have payments on loans coming due.

To try and raise their stock price, the company is going to do a reverse stock split. This to get their stock price up. The exact ratio to be used is to be announced. Their stock is now being traded, over the counter, under the name AUDA where their per share, price continues to fall.

Meanwhile, you can bet that things are rather tight. No major purchases for Audacy for some time to come would be my guess. I'm glad that I'm no longer working there.

One place where Radio continues to enjoy success is in vehicles. The problem is that today's radios are embedded into the modern dashboard along with a myriad of other gizmos. Additionally, thanks to the fact that everyone has a phone with a touch-screen, vehicle makers feel compelled to control everything the same way.

An article in 'Slate' put it this way –

**The trend toward car touchscreens has been a dangerous one for road safety. Those who drove in the 1990s will remember using buttons and knobs to change the radio or adjust the air conditioning without looking down from the steering wheel. Despite their name, touchscreens rely on a driver's eyes as much as her fingers to navigate – and every second that she is looking at a screen is a second that she isn't looking at the road ahead. Navigating through various levels of menus to reach a desired control can be particularly dangerous; one study by the AAA Foundation [concluded](#) that infotainment touchscreens can distract a driver for up to 40 seconds, long enough to cover half a mile at 50 mph.**

**"The irony is that everyone basically accepts that it's dangerous to use your phone while driving," said Farah. "Yet no one complains about what we're doing instead, which is fundamentally using an iPad while driving. If you're paying between \$40,000 and \$300,000 for a car, you're getting an iPad built onto the dashboard."**

The result of this is that Buttons and Knobs may be coming back....At least that's what I have been reading. The problem is that many feel that knobs and switches are 'old-school' Did you ever try and operate a touch screen with gloves on?

Speaking of which – I could not help but notice that Toyota is making available a Manual Transmission in 3 of their new Tacoma's. There are those of us that appreciate 'Old-School'

The following was recently posted on a popular remailer -

**After more than 53 years of my being involved in radio, I am retiring this Summer. Radio Engineering has been a great career for me, but it's time to slow down and give up the responsibility of being on call 24/7. Radio Engineering is a part of me and I expect to be a part of it for many years to come. I'm sure I will miss doing the fun real engineering stuff like transmitters and wiring, but supporting remote workers and computers not so much. I am certainly grateful for all the help and support I have received from the broader Radio Engineering community through the years. And I have done my best to help others when there was a need. We all deserve a pat on the back for a job well done. What would the world do without us?**

**KQED now has an opening for a Broadcast Engineer for the FM radio station. KQED FM and TV engineering have separate departments, but there is a degree of shared facilities and resources. <https://kqed.applytojob.com/apply/Mxw6jXieJM/FM-Engineer> KQED FM is fortunate that there are two engineers left who are fully capable of taking care of the studio, three transmitter sites and two translators. The new hire will be well supported and given the opportunity to learn the facility at a reasonable pace. The San Francisco Bay Area is an expensive place to live, but the pay at KQED is reasonably good.**

**I would be happy to answer any questions about working as an engineer at KQED.**

**Cheers,  
Larry Wood, CPBE  
KQED-FM**

Ford recently set off a 'stink bomb' with their announcement they were dropping AM Radio from their vehicles. Interesting how this action got the attention of many who have, previously, been silent on the matter of the struggles of AM. As the expression goes....'They came out of the woodwork'. Many in Congress took a break from fighting with the other party to support the idea that AM should remain in vehicle receivers.

The basis of this appears to range from – AM is old School – to – No one listens to AM anymore with some stating that they thought it was gone, along with cassettes and 8-track tapes.

This put FEMA in an interesting position after they recently spent a bunch of our money upgrading their PEP system (Including KIRO-FM) and the FCC who has been changing rules to help AM's.

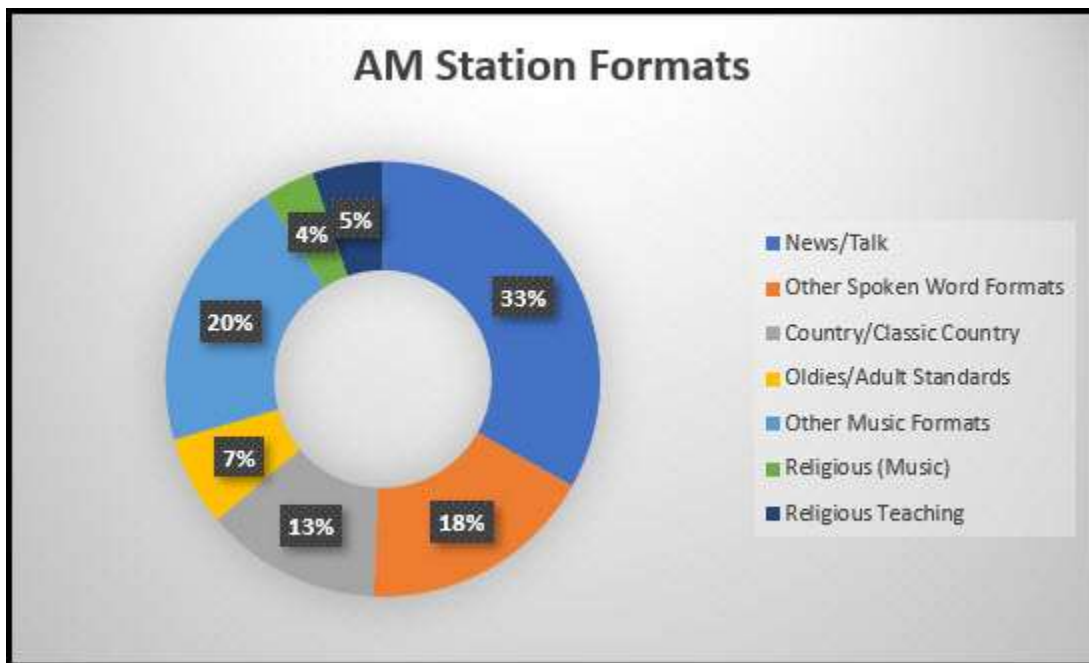
Apparently, part of the rationale at Ford may be based on their desire to 'save-a-buck' by not addressing all the interference that's created by the electronics in EV's.

In the end, Ford bowed to the pressure and backtracked.

Now if we could get the FCC to enforce their own rules and address the issue of the ever-increasing Noise-Floor caused by all the electric/electronic trash generators out there.

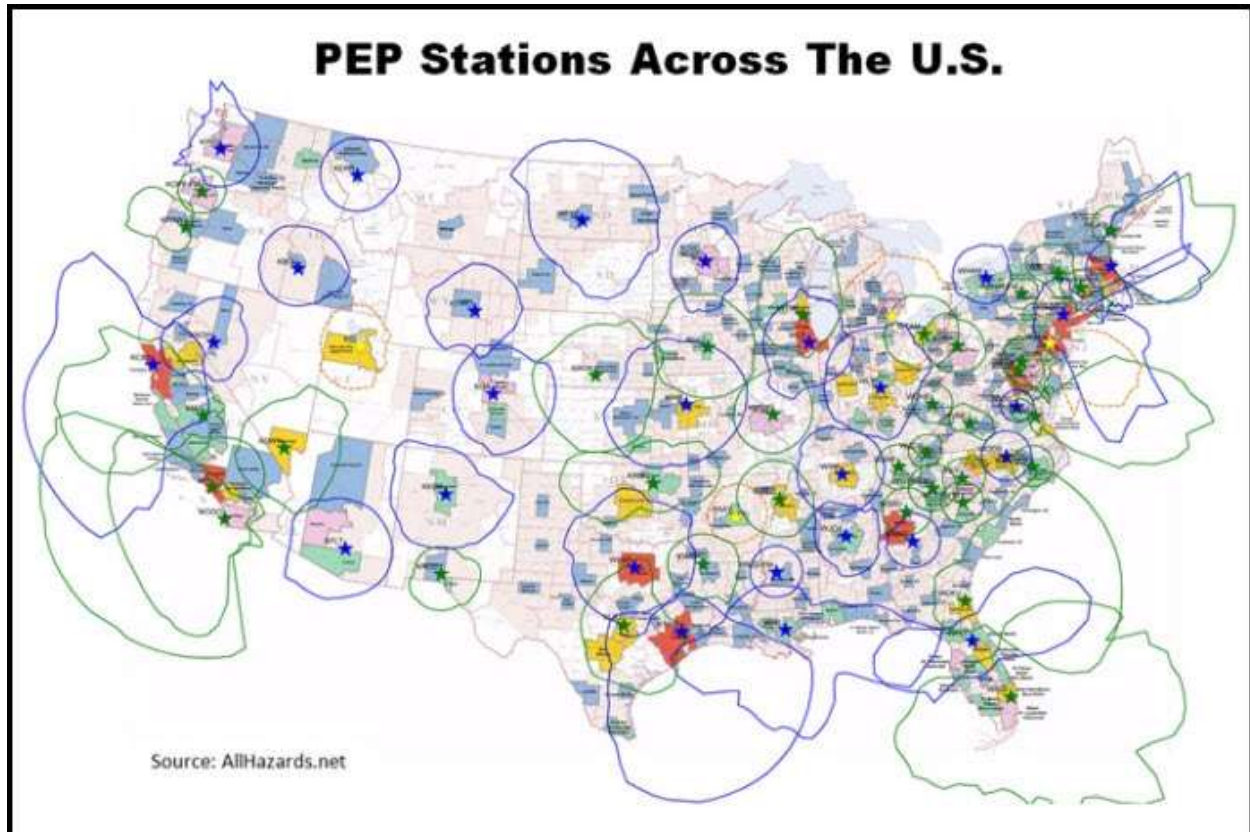
The problem with AM reception is, clearly, a matter of what's called 'Signal to Noise Ratio'. I recall a friend of mine that purchased a new vehicle and immediately complained at how poorly the AM section performed. Then he took a trip to Long Beach, where there is much less interference, and discovered that his radio was just fine and he was able to receive stations from far away. I had my own experience, several years ago, finding that I could listen to a Mariners game on my way home from Boise. Somewhere between LaGrande and Pendleton, in the Blue Mountains, I pushed the 710 button...and there was the ball game!.

Today, AM is a low-cost means for many to broadcast. Just listen to the AM band today and you will find a multitude of languages, something that was unheard of in the past. Talk-Radio has had a major impact – Today, the spoken word has become increasingly popular - Look at the following graphic. Perhaps hard to grasp, but you don't need 15Khz of audio bandwidth and stereo for speech.



Frankly, I hope that All-Digital stations takes off....It would solve a lot of problems.

The following map of PEP (Primary Entry Point) AM stations shows how this system relies on AM



NASBA, the organization of State Broadcast Associations noted -

**Almost all survey respondents (99%) indicated they participate in the Emergency Alert System (EAS). According to FEMA, Primary Entry Point or PEP stations – designated distribution stations for EAS messages that are mostly on the AM dial – can reach 90% of the U.S. population in the event of an Emergency**

Some have pointed out how this is a matter of money – Vehicle makers receive subsidies from SiriusXM while receiving no financial benefit from Broadcasters.

Clearly much of the fault lies with broadcasters whose views of their AM's is not what it was in the past. Providing compelling content is not a high priority. This has led to listeners to seek what they want on FM.

As the dust continues to rise – Ford threw in the towel and agreed to keep AM in their vehicles.



Today we have fewer AM's as the number of stations vs. the number of listeners is being equalized. Today, if you wish to replace your 5, 10 or 50 Kw transmitter, a broadcaster has a choice of ONE manufacturer- Nautel. As Washington State University recently discovered when they needed to replace their failing transmitter at KWSU in Pullman.

Here's a recent picture of a High Power AM Transmitter in final test at the Nautel Factory. Yes, that's a 200,000 watt model.



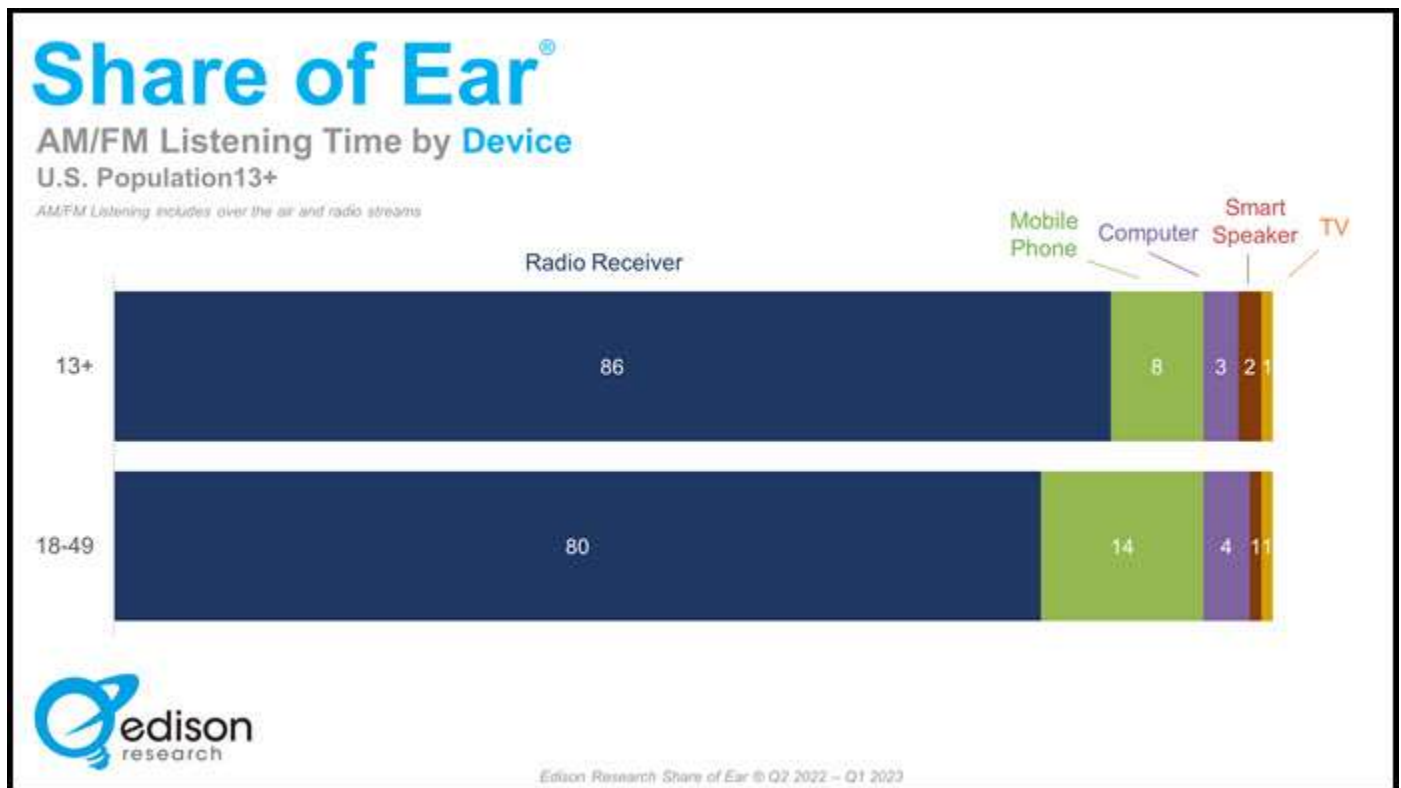
Edison Research has dug into this issue – Their findings are worth sharing -

Although the vast majority of radio listening still occurs via a traditional radio receiver, the mobile phone is the second most used device for radio listening, according to a Share of Ear update from Edison Research.

Overall, 86% of radio listening time among those aged 13+ takes place using a radio receiver, with 14% occurring on other devices.

Among the other devices, the phone accounts for 8% of all radio listening, followed by computer (3%), smart speaker (2%), and TV (1%).

Among 18-49-year-olds, 80% are listening to radio on a radio, while 14% stream radio on their mobile phone. Computer listening is next with 4%, and smart speakers and TV account for 1% each of radio listening.





Low Power FM's (LPFM's) are not supposed to be selling advertising. Apparently, for some, the temptation to make a few bucks was too much. Example – KELS, in Greeley Colorado (North of Denver) has been asked to pony up 15 Grand for doing so.

Ever wonder what happens when one of those big wind generators gets hit by lightning? It's not pretty. The machinery cover is gone and a lot of things that used to be white are now black. Betcha this is an expensive repair!



I love how Vacuum Tubes are being used these days - Makes me think how I have a very nice 833 that needs to be put to work doing something 😊



Back in the 'Tube Era' you were proud to own a McIntosh Stereo Amplifier. The originals came with a Chrome Chassis and were, in the minds of many – Beautiful, and sounded great. Today you can own a clone of the original 75 watt amplifier for only \$3,709.67



Leaking Radio Signals?

The headline read - **Can aliens around nearby stars detect us?**

In the 1982 movie E.T. the Extra-Terrestrial, an alien stranded on Earth had to "phone home" for his peers to come pick him up. In today's world, we're the ones phoning the aliens every day without even knowing it. When we use our cell phones, they ping off a network of cell phone towers worldwide, leaking radio signals into space. On Tuesday, SETI announced a new study that looked at how likely it would be for a nearby advanced civilization to detect signals leaked from our cell phone towers. It found that, at the moment, we're still somewhat difficult to detect. But it also found that our signal to ETs will grow substantially in the coming years.

On May 3<sup>rd</sup>, Jim Captain of Lile Moving in Kent emailed all the parties involved with the new KING-FM Auxiliary Transmitter project at Cougar as follows -

**I am pleased to announce the newest arrivals to the KING-FM family, identical twins Arnold Schwarzenegger and Danny DeVito.**

**The stork, under heavy duress, dropped off the twins at 10am this morning weighing in at a combined weight of 1130 lbs.**

**Arnold measured out at 81" tall, and Danny was only slightly smaller at 36" tall.**

**All are doing well and can't wait to be reunited with the KING family and KNKX cousins on the 19<sup>th</sup>-**

**Baby photo of the twins below-**



This was a 3-way transmitter shuffle – The Primary Goal- Upgrade the KING-FM Transmitting equipment so that, should it be used, it would be transparent to their listeners broadcasting in HD with HD2, RDS etc. (KIRO did the same thing a year or so ago)

- 1- The KNKX Collins transmitter, built in about 1978, which they purchased from CBC in Vancouver a few years ago, will be moved to an adjacent building where it will be parted out
- 2- The KING-FM- Continental transmitter will be moving 12 feet to the west to become the new KNKX Auxiliary
- 3- The new KING-FM, GV-15 Nautel transmitter will be installed where the Continental was. This will be the second Nautel for KING-FM, their Main Transmitter at West Tiger is GV30N installed about 6 years ago.

The light-brown unit here is the KING-FM Auxiliary Transmitter that was given to KNKX



(I'm not sure of the purpose of the Blue Tape)



Here the movers from Lile Moving have put the KING transmitter on wheels  
The box on the right is the KIRO-FM auxiliary.



After sheading its box, the new, KING-FM, Nautel is ready to move into the building





In its new location the, much smaller, Nautel GV15



Looking the other way



KING-FM's Mike Brooks with his reflection in the new transmitter.



A couple of 'old guys'. Mike on the left and me on the right



Bob Ricker of Midpoint Electric who is famous for his ability to deal with broadcast transmitters. On the right is the KNHC Transmitter.



Today's transmitting equipment, unlike the older models, are computer intensive. Here KING-FM's Terrill McKinney is deep in thought.





The old KNKX Collins, with covers removed, being made ready to head for the door



KNKX's Lowell Kiesow- getting into his work



Assisting Lowell – Greg Ristau



The old KNKX Transmitter heading for the building in the distance (with the open gray doors) where it will be taken apart, saving some items for emergency use.



The former KING-FM Transmitter being installed as the new KNKX Auxiliary



And.....Lotus had new studios built for KNWN, KVI and KPLZ...Take a look at this very cool video <https://www.youtube.com/watch?v=3ixxfCWE96Y>

I received this sad note recently from Russ Hill -

**If you have not heard, our son in law and the guy you helped get started in the broadcast industry, Jelson Dominguez has passed away after a 2 year battle with pancreatic cancer. He was such a good person and will be missed by many.**

Apparently, there is no longer an 1150 AM in the Portland area. The station lost it's site a while back. Bustos Media was the operator – I was living in Portland when 1150 went on the air.





Standing near the base of one of the West Tiger Towers, a Tower-Climber is holding a 'Field Sense' NIER monitor.

This instrument showed the level to be 200%. The yellow sign on the left has a warning that this is a 'hot-spot'

The Climber could not climb the tower until all the transmitters were turned off.

Sunset Pictures –  
From Dwight Small



From an AccelNet camera at West Tiger on May 16th



Things that strike me funny from Facebook

If the person who named Walkie  
Talkies named everything

Stamps = Lickie Stickie

Defibrillators = Hearty Starty

Bumble bees = Fuzzy Buzzy

Pregnancy test = Maybe Baby

Bra = Breastie Nestie

Fork = Stabby Grabby

Socks = Feetie Heatie

Hippo = Floatie Bloatie

Nightmare = Screamy Dreamy

I received this from Bob Trimble in an Email....He followed it up with this explanation

WC = Water closet.

Judging from the door / handle styles I think it is a long way from here. Britain or EU maybe?

Girls / innies / goseintos on the left,

Boys / outies / goesouttas on the right.

Certainly an interesting use of connectors !



That's it for this month.

Lord willing, I'll see you here next month.

Clay, K7CR, CPBE

SBE Member # 714

Since March 1968 / 55 years.