

FOR MAY 2020

Clay's Corner

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

As you can tell from the heading, I've been writing this column for a very long time under circumstances that were, somewhat, predictable....until about a month ago! Now, for all of us, the world has been turned upside down. Accordingly, the Column will be a bit different this month.

We have a lot of words and terms that are being used with this outbreak. We may have used them in the past, however, now they have different meanings. Here are a few that come to mind:

Social Distancing

Chances are you may have never used this term in the past. Now we all know what it means. In high school it meant stay away from the nerds.

Flatten the curve

A term you may have heard....but not likely in this application.

Ventilator

I've long known what a ventilator was. It was a device you installed on the roof of a building to exhaust heat in the summer. The one pictured here is often found on barns and industrial buildings.



Interestingly, if you were to now Google Ventilator, you will find pages of the medical type that are used to assist a person to breathe in a hospital.

Hunkering Down

Here is a term that had almost faded away. Luckily, old folks (like me) knew what it meant. I suspect there are a number of more freshly minted souls that did not. I found a couple of definitions:

When you hunker down, you settle into a safe, sheltered position. Some people evacuate their homes during a big hurricane, while others hunker down and wait.

Hunker down was originally an American phrase and means to dig in or settle in to ride out troubled times.

Shelter in Place

This term is, perhaps, being used in error. Shelter In Place conventionally means go inside, close all the windows and doors and stay there. This is a term used to warn citizens in the event of a hazardous condition outside, etc. The Emergency Alert System has an Event Code for this -- 'SPW'. Today, governments are issuing Stay-at-Home orders with exceptions, going for food or medicine, etc.

Essential Personnel

In terms of today's situation, Governmental entities will determine what

occupations or jobs are deemed essential to keep critical systems and supply lines operating. Examples are those who work providing food, medicine, medical attention, etc. Broadcasters have been deemed essential, including those technicians and engineers that keep the broadcast systems operating. This is very understandable during times where information is critical.

COVID-19

When I first heard this term, I immediately thought it was a cool name for a group of bad guys in a James Bond film. Later we all learned the real meaning:

COVID-19: 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for 'disease' - 2019.

Just to add to the confusion, some call it 'corona-virus'. By now we have all become familiar with these various names.

PPE

In this situation, PPE is Personal Protective Equipment, Masks, Face-shields, Gowns etc. In other fields this could mean Hardhats, Boots, Aprons, Gloves etc. The shortage of 'on-the-shelf' PPE's has caused an extreme example of 'The Blame Game'. Apparently, everyone wants to blame everyone else because they have a shortage of these items. Here in our area we saw a number of firms that used to make different, but perhaps related, products jump in to help. The bottom line is that apparently no one ever thought they would need these quantities.

Supply Chain

One thing seems clear. Many have been caught off guard with the severity and speed at which this virus has spread. A lot of our problems stem from the fact that very few users of a product stock very much of it. In the past, a business (hospitals etc.) would have a large amount of storage, either on site, or in the same town. Now, thanks to our very efficient transportation systems (think UPS and FedEx) they don't need to stock much, as it can be there the next day. Today, storage of much of anything is thought of as a waste of space and money. The problem is, many of the middlemen feel the same way.

Look what happened to Toilet Paper! A big bump in demand caused huge supply problems because the – just in time – philosophy depends on 'average use figures', to know how much to put in the 'supply chain'. This

issue goes all the way back to manufacturers who are not about to build, and stock, much of anything beyond what the average demand dictates. Now we have a situation where medical supplies are needed in huge quantities and no one has that much on the shelf.

Unfortunately, States (and perhaps Provinces) look to the Federal Government to come to their rescue, thinking they can supply unlimited amounts of whatever is needed overnight. As we have all come to understand, this was faulty-thinking. In many cases, the Federal Government is a procurement agency. You have a need, they procure it on your behalf. So why weren't all these masks, gowns, shields, gloves etc. sitting in a warehouse somewhere? For the same reasons! Everyone, at every level, stocks what their projections indicate they will need. The problem was the demands of a huge pandemic was not factored in.

Thanks to computers, we now find a host of people trying to plan for the future, based on the number crunching of computers. When will this end, when can we get back to work, how many will die etc? Occasionally you will hear someone say, in response to questions requiring one to have a 'crystal ball', 'the Virus will tell us' or, it's up to us if we follow the guidelines. The term 'educated guess' is rarely, if ever, heard anymore. It appears that UDub is playing an active role in this area with many quoting our home-town school.

This outbreak has had a huge impact on the environment. Suddenly, cities around the world that have been choking on pollution and haze are seeing blue skies. Likely many have never seen it that way before. For those who question the impact of man and our machines, now have lost their argument. Many major cities, Seattle included, have been trying to get us out of our cars and into public transportation. Now there are fewer cars and many are afraid of those transportation systems, due to the fear that being confined with others is a health hazard. The result is less public transportation because of fewer riders. With the emphasis on working from home, Transportation Planners are going to have their hands full when we overcome this situation. Perhaps more Models and Projections?

Then, with a stroke of lucky timing, Seattle discovered that the high-rise freeway bridge over the Duwamish, connecting West Seattle is cracking...and could fall down. Thankfully, they left the old lower-level bridge in place for use by Emergency Vehicles and others that have to

reach Harbor Island. However, with the Pandemic, 100,000 vehicles that were using the, now unusable, bridge want access – Wow! They are saying it could take a couple of years to resolve this mess.

I have to wonder what people do that simply don't cook? Many rely on restaurants now that are no longer in business. I noted one restaurant in my town went from offering take out to 'we will bring you your food' delivery service. Certainly the drive-up fast food industry has been busy. At just about any hour. there is a lineup at their drive-up windows.

One word that you hear constantly is 'CORONA'. The word CORONA has been around a while, but a lot of things have changed since the name corona has been linked to a virus caused pandemic!

There is Corona, California, a city in Riverside County with a population of over 150,000 and a borough of Queens in New York City named Corona. Bet they are loving their name?

Let's not forget the Sun also has a Corona, the rarefied gaseous envelope of the sun and other stars. The sun's corona is normally visible only during a total solar eclipse, when it is seen as an irregularly shaped pearly glow surrounding the darkened disk of the moon.



With Americans suddenly linking coronavirus with Corona Beer, their sales tanked and the brewer, in Mexico, stopped making it.



Do you recall the Corona automobile? Toyota Corona was an automobile manufactured by the Japanese automaker Toyota between 1957 and 2001. Traditionally, the competitor from Nissan was the Nissan Bluebird. The word "corona" is Latin for "crown", a reference to an earlier vehicle Toyota offered called the Toyota Crown. Bet Toyota is happy they no longer market this model. 😊



One area where there is no shortage – ‘The Blame Game’. There are many political leaders that are being called out for not reacting soon enough, not

being prepared, not listening to the experts, etc. So what happened? Couple this with the upcoming elections, it will be interesting to see just how many will use various political leaders' approach to dealing with COVID-19 as ammunition pro and con. If we are lucky, some of this money will flow to the Broadcast Industry and help with the economic situation many of these stations are facing.

Another old motto has come to mind – that of the Boy Scouts ‘Be-Prepared’. Many are questioning how much we have been prepared for something like this. Perhaps it’s human nature to prepare for things that we have experienced and not for things that we have not? I learned a long time ago that we are, pretty-much, short sighted and have little tolerance for those that are not – calling them ‘Chicken Little Types’. Many broadcast engineers fall into that category, by nature. We like to plan ahead for unforeseen events, perhaps because we have learned, many the hard way, the pain that is caused by not doing so. Typically, managers (and politicians) are focused on what they need to do to keep their jobs, and not on what ‘might’ happen.

Our society has changed so much over the years. Today it’s common to run to the store for what we need at the last moment. Our grandparents likely were much better prepared as a result. Many people's kitchens today don’t include a pantry stocked with dry-goods that can be made into meals. Then again, how many have the ability to prepare things from scratch like grandma did?

Emergency managers have long been trying to get us all ready for the ‘Big-One’, to be able to ‘hunker down’ for a period of time without the ability to go to a store, or have someone come to our rescue. Mainly these warnings have fallen on deaf ears. Perhaps this event will be big enough to cause some rethinking? Granted, the earth has not been shaking, in the conventional sense...but it certainly has shaken us up. Just be thankful that we have not had a massive quake on top of it (uh, perhaps I should have not written that one?)

Financially, many live paycheck to paycheck. The money they make that day provides for food tomorrow, etc. Statistics confirm this. The idea of a 'Rainy Day Fund' is a strange philosophy to many who spend all they make and use credit cards to extend their way of handling money.

Many feel good things come from bad. Perhaps this event will change the way government, businesses and families look at things. We can only hope.

What is not talked about is, how are we going to pay for all of this? Governments and businesses have been borrowing, in record amounts! I know the Washington Legislature is going to have to deal with this issue. Hang on folks, these things are paid for via taxes.

The laws of supply and demand are certainly skewed in some new ways. There is tremendous demand for news and information. The ratings for the, traditional, evening TV newscasts are way up. In Radio, KIRO-FM, KUOW (FM) and KOMO AM are now ranking #1, 2 and 3 in the Seattle Market.

At the same time demand is up, revenue is down, because the traditional buyers of advertising are not buying. One of the major sources of advertising is car dealers. The only thing I've seen are a few spots urging people to bring their vehicle in for service or repairs. I suspect there is a LOT of this kind of maintenance that's being put off...especially if your paychecks have stopped. This all 'trickles down' to a reduction in revenue to Radio and TV stations.

I found it interesting that Hubbard, who operates five radio stations in the market, with no news department, created an arrangement with KIRO Radio to provide them with the missing program elements.

Speaking of Hubbard, congratulations to Alex Brewster who recently made the move from Assistant Chief at the Entercom Cluster to Chief at Hubbard. He replaced the departed Dave Ratener. This came at a great time for Alex, and, perhaps, at a bad time for Phil Van Liew at Entercom, who now

has to pick up the slack. In light of Entercom's announcements about the economic situation, it's not likely they will be hiring a replacement for Alex, at least not in the short term.

Those who are working in areas that are deemed 'essential' are thankful they have a job. Those that are not, are likely thankful they had a rainy day fund to fall back on. Those that did not plan ahead, are having to rely on unemployment benefits and the frustration that comes with having to deal with an overloaded system that has been unable to keep up with demand. Another example of where supply systems are designed for 'average times'.

There are certainly a number of people working that make me wonder. Example, the number of old beater pickups towing a trailer with hand tools and lawnmowers. Seems to me that cutting grass and landscaping is deemed (by someone) as essential?

The idea of converting some AM Radio stations to all-digital has been getting a lot of press lately. Apparently, the FCC agrees that this idea may be a way to pump new life into the place where broadcasting began. According to published reports, the Commish has been receiving some supportive comments. The problem is, as I see it, we have a very bad case of timing. With a number of radio stations having recently gone dark across the country due to the virus situation, it strikes me as a very poor time to ask a station owner to come up with the cash to experiment with all-digital. Frankly, I hope things improve and look forward to actually being able to experience this mode first hand.

Gotta hand it to Hubbard's local 98.9 'The Bull' for coming up with a unique prize. On April 9th, I understand they gave away 1,000 rolls of toilet paper.

Nice to see a local fellow get behind helping with the coronavirus situation. Bill Gates has funded testing of a potential vaccine. Bill, of course, is one of the founders of Microsoft.

From the 'You'd think they'd learn by now' Department comes news that for the 6th time in 8 months the FCC has fined a broadcaster for the improper use of EAS Tones. The latest is WNEW in New York. What, perhaps, made matters worse is the fact the tones were used during a skit that made fun of the National EAS Test that was scheduled for later the same day. Normally this will cost \$8,000. However, in this case, the Commish is suggesting 20 Grand.

For too many, this Virus situation has many sequestered to their homes. This means different things depending on where home is. For some, this means a small apartment. For others, like Dwight Small, who not long ago, retired to his place on the Lake, stepping out on his deck recently and snapped this picture. A very lucky man indeed!



I'm blessed with living on the edge of the Green River valley, having to put up with sunsets like these from my rocking chair on the deck.



When I am not hunkered down, I am performing 'essential work' at a transmitter site somewhere. The good news is, the majority of the time, there are not other humans nearby. This picture was taken, coming down from Striped Peak, west of Port Angeles.



Speaking of Striped Peak, here is the sign posted at the gate at the bottom of the hill. Another reason why I did not see anyone else while up there.



This year, none of us got to go to Las Vegas for the NAB Convention, as the whole town was under a coronavirus shutdown. Apparently, this does not stop construction, as the project to enlarge the already huge Los Vegas

Convention Center is underway. If you recall, across Paradise Road from the LVCC was a large parking lot and the historic Riviera Hotel. The hotel was torn down, making way for a new 'West Hall' to be added. The LVCC is already mammoth, with something like 2,000,000 square feet of space. The new facility will add 600,000 square feet. Putting this another way, the present LVCC is equal to about 13.8 Costcos. When completed, it will be equal to 18 Costcos or 2.6 million square feet! You will really want to bring comfortable shoes to the 2021 NAB. Never fear, the Boeing plant in Everett is still bigger at 4.3 Million square feet.

Another item impacted by the Virus, talks to purchase Tegna (Owner of KING-TV and KONG-TV) have apparently stopped. Obviously, cashflow issues have been altered everywhere. The coronavirus has spawned more radical thinking. In this case, the rumor that 5G cellular systems have something to do with the spreading virus. This has resulted in 'wackos' out destroying 5G cell sites, who they believe weaken people's immune systems. From this has come a new term 'covidiot'. This, all despite the WHO pointing out there were thousands of COVID-19 cases in areas of the world where there are no 5G systems. Unfortunately, today's internet connected world has enabled those who spread rumors and conspiracy theories to flourish. What is perhaps more frightening is how many, seemingly normal people, are prone to believe this stuff. Worse yet...they live among us!

For some time, Radio and TV stations have had the ability to broadcast from remote locations away from their studios. The pandemic has accelerated this movement to a degree that no one could have imagined. With Radio, it's pretty hard to tell that an announcer is speaking from his home. TV is another matter. Typically, around here, local stations will have one anchor at the studio with the rest of the crew operating from home. Initially some of the production was a bit clunky. However, as time goes on, it's looking pretty good. Field reporting is another interesting issue. To start with, it appeared that stations were getting reports from the field using smartphones. The video quality was a bit worse than SD and the audio often sounding like a tin-can-telephone. For those that insist that everything

on the air be 'broadcast quality', this must have been hard to swallow. Think what this would have looked like if we did not have the internet, bonded cellular etc. There are likely a lot of things learned with this event – lessons that will find application going forward for sure. The real winners are the firms that make the equipment that makes this possible. They would have likely never predicted the demand.

Non-commercial broadcasters are taking a hit here also. NPR has announced reductions and financial woes. CPB is getting a cash infusion from the Feds.

In the 'Good News' Department, the lack of demand has caused gas prices to fall dramatically. By the middle of the month, I was seeing gas selling for under \$2 a gallon.

Another item, thanks to very heavy snow in the mountains late in the winter, projections are that our snowpack is going to be above normal. Be thankful, as much of the Southwest is in the midst of a historic drought.

I got a note from Mike Gilbert informing us that KBDB in Forks has added another HD Channel to their station. Perhaps the first station in the area running an HD4. Mike sent along this picture of their transmitting antenna on Mt. Ellis, north of Forks.



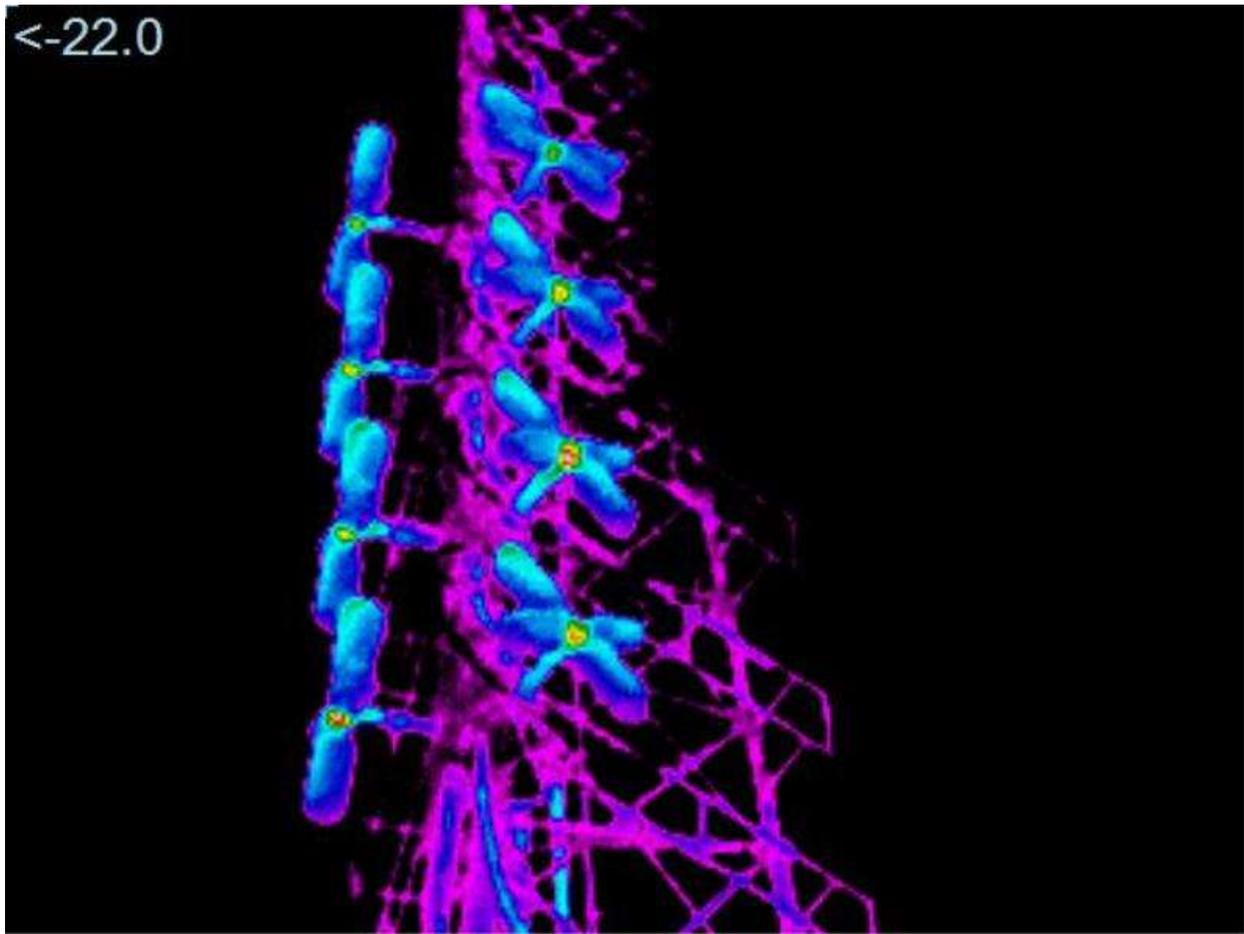
Many of us will remember when KFKF was a radio station in Bellevue (Kemper Freeman - Kemper Freeman). Now those call letters reside in Kansas City.

As, perhaps, an indication of just how far HD Radio has come, IHeartMedia

has moved their Atlanta modern-rock station to an HD Channel to make room for a Spanish CHR format.

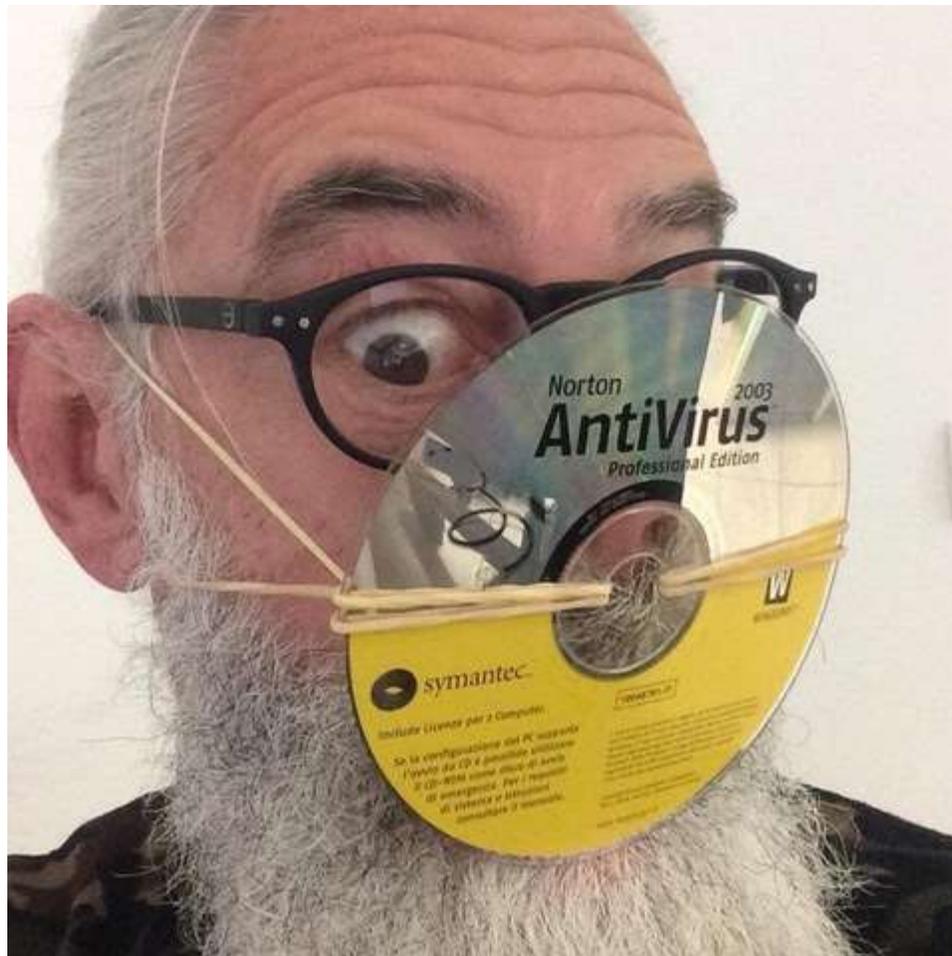
Another item impacted by the Virus is TV Antennas. Many households are now wanting to see local news from local stations and have discovered that a TV antenna is the answer. According to a recent survey, 41 million families will be watching OTA TV via an antenna by the end of this year...a new wrinkle in the growing move to cut the cord.

One of the techniques used to screen people for the coronavirus is to check their temperature. This is often done with a point-and-shoot thermometer that's commonly available. Another method is to use a thermal scanning camera, perhaps from Oregon-based FLIR. This reminded me of how we have been using this technique for years, checking the temperature of one of the broadcast antennas on West Tiger Mountain.



Oh yes, add to that list of those working from home – the FCC is even doing it.

I had to laugh at this one sent to me by an old friend in Wisconsin. An antivirus mask indeed!



First quarter results are in from the FCC regarding the number of stations on the air:

- FM Translators and Boosters are up 2% with 140 new ones, total 8,188.
- The pace for AM stations to put on FM translators has slowed.
- AM continues to fade with 13 less stations on the air. The current economic situation is likely to further reduce the number of AM's even more.
- There are fewer commercial FM's while the number of NCE's grew.

- Could the novelty of an LPFM be wearing off? Their quantity is down.

I had a nice surprise – a certificate from Washington State University noting my ten years of service. Wow has that ten years gone fast!

Interesting to see how Non-Commercial radio stations are doing. As we all know, KUOW is a ratings giant in Seattle. In Portland, KOPB is also in second place. This is not a situation unique to the Pacific Northwest. In Washington DC, WAMU is tied for first place. In Austin, KUT is tied for second.

With a number of people stuck at home – the question is – how many are listening to Radio? Granted there are those who are using their ‘Smart Speaker’ as a radio. I just happened to be visiting a local store, where I wandered into their electronics department. To my surprise, they had several AM/FM Clock Radios for sale. Recent surveys show that less than half of those 18-34 have a traditional AM/FM radio in their home. If they want radio, they use their computer. I suspect that many in this age group never think about a radio in their kitchen or family room. Perhaps the same who are surprised to learn that they can pick up TV – for free – with a contraption called an antenna.

One of my readers spotted this antenna in Bellevue recently. Anyone know what it's for?



Just had to share this one with you. On the way to the Cougar Mt. transmitter facility, in a very-nice residential area, there are a couple of concrete retaining walls alongside the road. Both of them have several metal 'Cougars' as decorations. During the holidays you will often see them decorated in some way. Someone had a COVID moment and decorated this cat.



Other things impacted by the Virus –

- A sharp reduction in Robo-Calls?
- An increase in the amount of emailed humor from friends who are obviously spending more time on the home computer these days.

On the 21st of April, the Washington Governor laid out his plan for moving forward. Personally, I appreciate his methodical approach to all of this, as opposed to some that have what I call a 'non-scientific, knee-jerk' way of

doing things. We all need to remember that it's highly unlikely that any person in a position of authority in government has any experience dealing with an issue like this one.

The totals for this disease are staggering. At this writing, the totals look, roughly, like this:

Worldwide we are approaching 3,000,000 cases and over 200,000 deaths.

U.S.A we are approaching 1,000,000 cases and 55,000 deaths. This is about 1/3 of all the cases in the world and about 1/4 of the deaths. (The numbers in New York are close to 300,00 cases and 18,000 deaths.)

WA State we are approaching 14,000 cases and will likely exceed 1,000 deaths. (At this writing, the number of new cases per day is actually going up.)

One of the major problems with these numbers is that no one knows for sure just how many have it...a question that cannot be answered until everyone is tested.

It's also interesting to look at the deaths from other causes. The following data is from 2017:

WA Leading Causes of Death, 2017	Deaths
1. <u>Cancer</u>	12,664
2. <u>Heart Disease</u>	11,582
3. <u>Alzheimer's disease</u>	3,710
4. <u>Accidents</u>	3,455
5. <u>Chronic Lower Respiratory Disease</u>	3,177
6. <u>Stroke</u>	3,028
7. <u>Diabetes</u>	1,812
8. <u>Suicide</u>	1,297
9. <u>Flu/Pneumonia</u>	1,041
10. <u>Chronic Liver Disease/Cirrhosis</u>	982

From this it's pretty easy to see how this virus is serious, however, until we have a year with it, will be unable to say how it will be positioned on a list

like this one.

Certainly, everyone is anxious to see this be over with and a return to the way things were. We are being told that the recovery will be slow, take time etc. This is tough on a society that is used to 'date certain' information. An answer like 'We just don't know for sure' is a hard pill for most to swallow.

Perhaps there is some comfort in knowing that this is something that the whole world is having to deal with, ie, we are not alone in this battle.

There is hope in knowing that scientists, all over the world, are racing to find a treatment and, hopefully, a cure.

As we dream about the day that this is behind us, we are left with a host of questions:

- The first, and most obvious one, when will we get back to normal?
- Assuming that we 'slowly' will, with restrictions, what will that mean?
- Will things ever be like they were -or- will we have a 'new-normal'?
- How much will fear and trust alter the path forward?
- With so many industries (Broadcasting included) now permitting working from 'safe-locations' will this become more commonplace now that we know how to do it?
- How many businesses, large and small, will be killed off, never to return?
- Assuming that 'Social Distancing' and wearing masks and other protective measures will be normal until we have vaccines, how will this impact things like sporting events. etc?
- As you go by the football/ soccer and baseball venues in So-Do...how long will it be before they can be used again?
- When will our children be able to go back to school?
- How will this impact our Political Landscape?

- Who is going to be blamed for all of this?

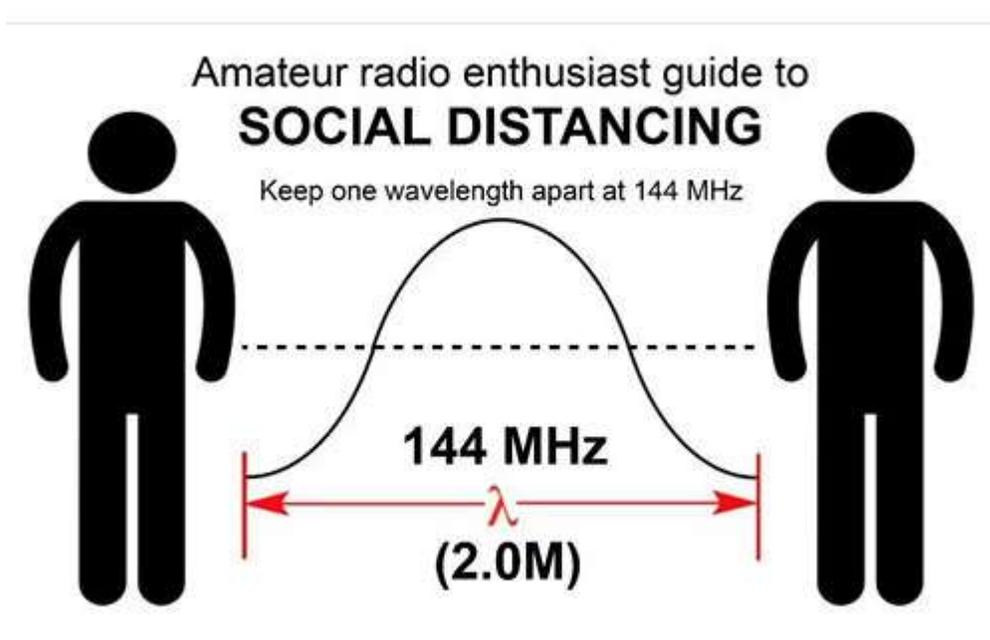
Perhaps the most important questions are:

- What have we learned in this process?
- What will we do differently the next time we are faced with a pandemic?
- Will someone please, in addition to coming up with a cure, please invent, and manufacture in large quantities, a fully functional crystal-ball for times like this?

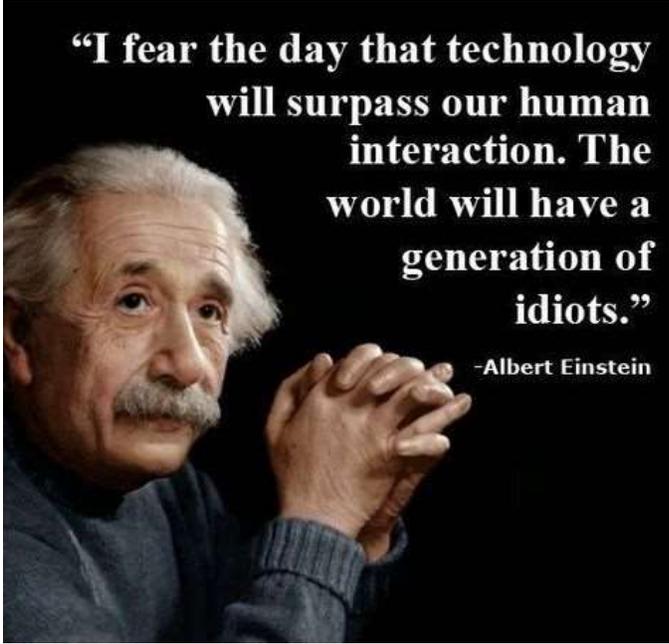
Here's an excellent summary of where we are....from Bill Gates:

<https://www.seattletimes.com/nation-world/it-is-impossible-to-overstate-the-pain-fight-against-coronavirus-will-define-our-era-bill-gates-says/>

Frequent contributor Mike Brooks of KING-FM sent me this item that would be of particular interest to those of you who are Hams.

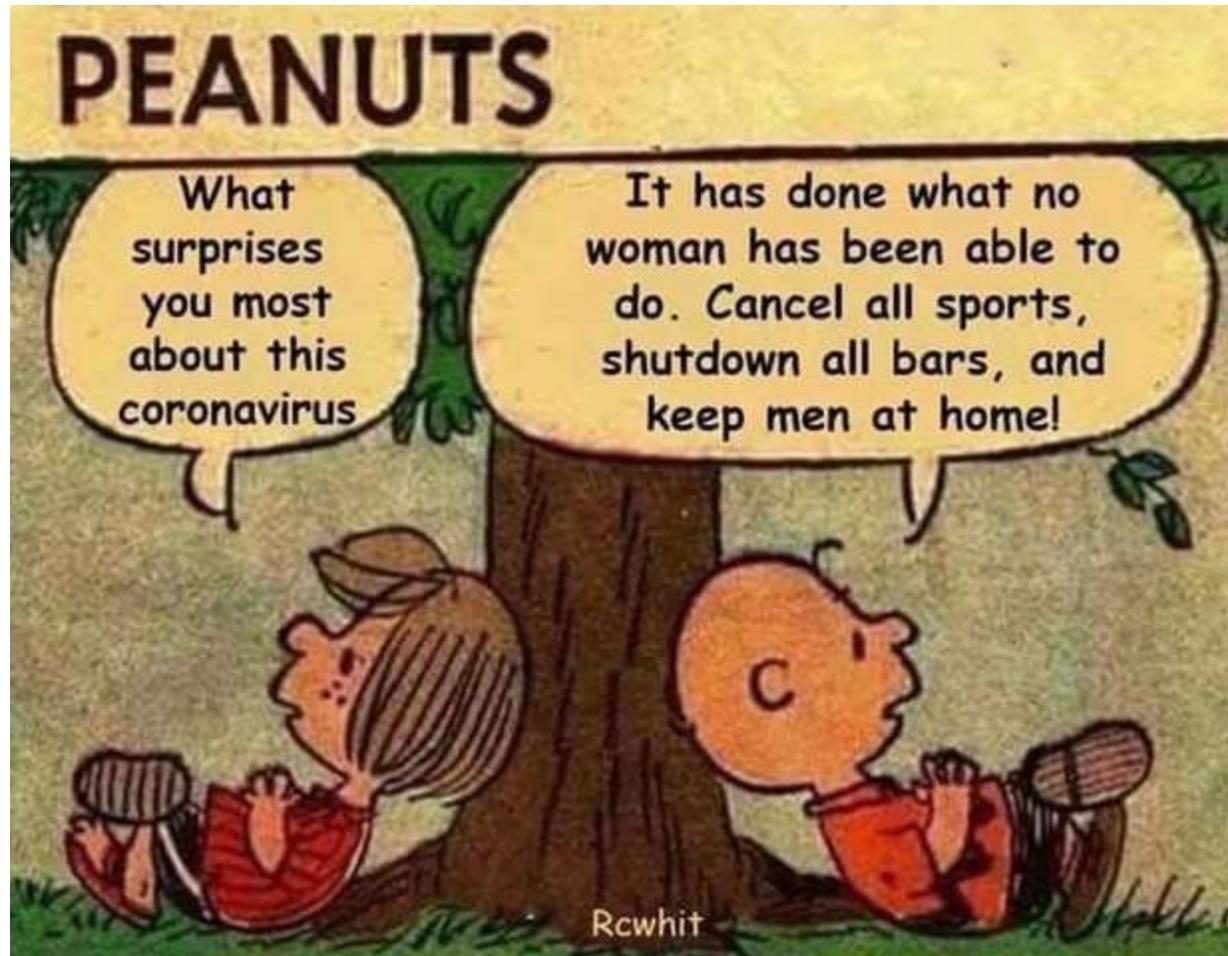


Some more contributions from friends stuck at home:



**”COMPLAINING
ABOUT A
PROBLEM
WITHOUT POSING A
SOLUTION
IS CALLED
WHINING.”**

**-Teddy
Roosevelt**



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

Until then – Hunker down and stay safe !!

Clay, K7CR, CPBE
SBE Member #714 since February 5th, 1968