

## REPLY COMMENTS ON OET 17-215 TO BRUCE PERENS COMMENT

BY JANIS CARSON, AB2RA, licensed since 1959, Extra Class, ARRL member 40 years

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This reply comment responds to the Bruce Perens comments in the FCC data base at:

[https://ecfsapi.fcc.gov/file/102617713456/Perens\\_ET\\_17\\_215.pdf](https://ecfsapi.fcc.gov/file/102617713456/Perens_ET_17_215.pdf)

**INTRODUCTION:** Because of the length (15 pages) of the Perens comments and the range of subjects addressed in it, I have chosen to break my reply comments into multiple responses to confine my reply comments to one subject, or a group of related subjects. This reply comment refers to the Perens comments regarding band planning, band segments, incentive licensing issues raised, and other related items. I consider this reply comment the most important of my comments on 17-215.

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### RESUME

**DISCLAIMER:** I have worked previously with Bruce Perens during the Morse Code testing filings. I was a member of No Code International, and was an active participant in the IARU and FCC's action to end Morse testing. It was absolutely the right thing to do, and long overdue. The eventual outcome of ending Morse Code testing was revitalization and steady growth of the amateur service, as shown by the graph Illustration 2 on page 6 in the Perens comments. Contrary to all the doomsayers, amateur radio IS growing. It is just growing in ways that some did not expect.

Bruce Perens and I simply disagree on this band planning and enforcement issue, and I have stated my views, with facts, to support my position. Bruce Perens has earned his stripes as a maverick iconoclast on Morse code testing and promoting Linux as an alternative operating system to Microsoft, even working with Hewlett Packard as an advocate for Linux and open source software. I salute his career and accomplishments.

## FUNDAMENTAL ERROR IN REPRESENTING BAND SEGMENTS

In the Perens comments, paragraph 6.2 on page 10, states:

*“A main thrust of the FCC-enforced Amateur band-plan enacted in §97.305 through §97.309 has been to protect narrow-band modes, primarily radiotelegraphy (defined as a digital mode), from interference by wide-band modes, primarily voice communications. Voice is allowed in limited sub-bands, while telegraphers can operate in both the exclusively digital (meaning telegraphy) sub-bands and the voice bands. With the advent of digital communication this plan is broken, because “voice” modulations are limited to be used in voice band segments, while “digital” modulations, which can carry voice as well as many different kinds of information, are admitted to band-segments that were previously the protected domain of telegraphy.”*

*“Regulating the type of payload just doesn't make sense any longer. If a protected sub-band is required for telegraphy, excluding voice modes, that sub-band should be specified for operation with a narrow bandwidth, for example 100 Hz, rather than a particular modulation designator.”*

**BANDWIDTH ISSUES:** Bruce Perens incorrectly characterizes the requested band widths by multiple previous comments on RM-11708 (now WT 16-239) and RM-11759 by referring to a 100 Hz band width. **100 Hz is an unwarranted exaggeration. Most of the commenters requested a 25 Khz incentive licensing segment at the bottom of the bands, currently used by Extra Class operators for CW at 100 Hz band width, and the rest of the CW/DATA band segment at something like 500 Hz band width for narrow band digital modes in common use, to protect both of them from wide band “ROBOT” unattended email and internet providers (ACDS). In return, ACDS and wider emissions were to be confined in their own separate (increased) segment to mitigate congestion.**

Voice, Image, and TV modes inherently require wider band width, and should be in their current band segments. The true issue the FCC needs to address is the incompatibility between “ROBOT” and “HUMAN” users, and the excessive band width the ROBOTS desire to operate as faster email and internet service providers inside the amateur bands. The FCC is clearly frustrated with the constant petitioning, and has decided, in WT 16-239, to abdicate its regulatory “due diligence” by eliminating any band width limits. **That scheme could be successfully implemented, if the new class of digital unlimited band width emissions and “ROBOT” stations were given their own separate band segment.** The real possibility of emerging technology, Software Defined Radio, rather than conventional superheterodyne (with fixed band width crystal filters), could result in unregulated digital emissions that occupy an entire HF band, not just a band segment. See my previous comments recommending a “bandwidth” style regulation which works, and closely follows the ARRL HF proposed band plan which triggered RM-11708:  
<https://ecfsapi.fcc.gov/file/109011952607702/FCC%20FILING%20docket%2016%20239%20FINAL10%20%20rm11708.pdf>

There is another way to fix the problems presented in RM-11708, RM-11759, and WT 16-239. **The FCC should authorize the use of Pactor 2,3, and 4, or STANAG but to only RACES stations, under Part 97.407.** That would prevent its commercial use by non-RACES stations, and make it IMMEDIATELY legal without any need for any FCC STA at all times. A local civil defense or government organization could activate RACES operations without ANY DELAY. The FCC had to do an STA for the Puerto Rico relief work by the amateur service recently; it would never have to do that again, with this simple change.

The FCC policy historically separated incompatible modes by band segments. By grouping similar emissions together, more efficient spectrum use results. Indiscriminate mixing of emissions creates contention for spectrum and disorderly conduct. A lack of FCC regulation of band segments introduces further potential for havoc. Recent petitions sought to dismantle that structure for no good reason.

Even people using various sound card type HF digital modes have to figure out what modulation method to identify the type of signal they are tuned to. Is it JT65, Olivia, psk of some type, or something else? What mode do I have to engage to reply to this station, or is it even a station I wish to contact? It is a digital “Tower of Babel”, which will eventually pick a winner.

In the case of voice, VHF and UHF repeaters are an example of separating wide band FM (and now even digital voice) modes that use automated voice repeaters from weak signal narrow band modes like CW, SSB, and even FM simplex. Mixing them did not work, and repeaters were coordinated. But none of them propagated world wide (except for satellites, which have their own slice of the spectrum). In this case, VHF and HF procedures are similar. But voice repeaters are only allowed on the upper end of 10 meters. The error made years ago to allow digital automatic repeaters (ACDS) on HF is now manifesting itself. We certainly do not want to allow unattended voice digital repeaters on HF, or ACDS digital signals outside their assigned segment.

**THE EMPORER'S NEW CLOTHES:** This is not the first time we have heard about alternative voice modulation schemes. The ARRL was pushing Amplitude Compandored SSB about 25 years ago, as a solution to the congestion on the HF bands. It was an extra box, with extra cost, which did not deliver on its promises. It was largely ignored by the amateur community. Their transceivers worked just fine without the extra box and cost. This “innovation” did not gain wide acceptance in either the amateur or commercial services. The FCC wisely fixed the problem of HF band congestion by the “Novice band refarming” ruling to create larger VOICE segments.

Later, AOR offered an OFDM digital voice “modem” as an accessory box that connected to a SSB transceiver mike input. Its band width was therefore within a standard SSB channel. **This type of equipment is currently being employed by a very small group of advocates, without any FCC action needed to revise the Part 97 rules or its band segment assignments.** The latest version seems to cost about \$450, the price of an entry level HF transceiver or compact beam antenna, with no major improvement in functionality. This AOR device did not deliver on its promise any better than Amplitude Compandored SSB did before.

**Now, Bruce Perens and others are demanding that we immediately take a wrecking ball to Part 97, to accommodate a “new class of emissions” that so far has been in development for years, with no successful commercial roll out, except for a few experimenters. There is no demonstrated need, since the AOR digital voice unit seems to work legally within the existing SSB transceiver band width. So does Codec 2. If there is a widely accepted commercially viable Codec 2 digital voice product, the need for adjustments to accommodate it should not require a complete rework of Part 97 either. At present, there is no such offering, and it is more of a “science fair project”, and certainly not widely adopted. If Codec 2 ever can be made to work in weak signal conditions as well as FT8 does, maybe it will be embraced. The market will decide, as it did in the past. In any event, modes which are reasonable for VHF, like TV or massive amounts of internet data, will not work on HF because the entire HF spectrum would not be enough for just one signal.**

**Bruce Perens (page 12) states: “*The 2.8 kHz bandwidths specified fit single-sideband voice transmissions and FreeDV digital voice.*”**

**This statement alone demonstrates that the entire Perens comment is not supported by FACTS showing his Codec 2 digital voice project is being adversely affected by existing Part 97 regulations and is completely without merit.**

I recently read that Ajit Pai believed in a “light touch” and “market based” decisions. The “Nuclear Option” for Part 97 is heavy handed, a hugely expensive undertaking, and contrary to all historical market conditions. It dismantles a regulatory framework that has served the amateur service well for decades. Once Part 97 is undone, it will be a massive project to unravel the damage.

**If any revision to Part 97 is undertaken for digital modes, it should be done exclusively for the microwave bands, which can handle the band widths needed.** In that case, it could be coupled with amateur satellites that could relay digital email or other information at rates that are attractive to users, and might greatly increase band occupancy on the microwaves, which are currently not being used to their full potential by amateur radio. The current maritime and “off the grid” HF Winlink email users could easily finance the launch of higher performance dedicated microwave AMSAT internet satellites, using commercial SpaceX launch vehicles. The ARRL could use its substantial finances and resources to promote this use of amateur radio. These satellites would be accessible to current TECHNICIAN class amateur licensees, and possibly create a new stream of amateurs. True innovation by hams.

**MARKET IMPLICATIONS:** Businesses and investors typically abhor chaos. The proposed Part 97 rewrite certainly is chaos as written. Amateurs will delay purchase of new equipment because there is no clear standard or regulations to protect spectrum, and many incompatible possibilities. No one wants to wind up with a useless “orphan” product. Manufacturers, facing a shrinking market, will be reluctant to develop or offer new products. Pure Software Defined Radios are relatively rare and expensive now. Icom recently offered a “closed source” mid priced SDR based HF transceiver with a conventional front panel user interface that has become fairly popular. That all might end quickly, if people stop buying. If congestion and interference resulting from bad decisions allowing proliferation of unregulated excessive band width emissions throughout the HF spectrum, many existing hams might EXIT the amateur service. This is contrary to the presumed goal of INCREASING the participation in amateur radio.

**DEJA VU ALL OVER AGAIN:** The FCC just went through a similar rule making process in response to a petition, RM-11769, which was partially withdrawn by its author, and later totally dismissed. That petition requested much the same process, except that he attempted to devise a scheme to maintain band segments by their payload. A “text” output included CW and DATA modes. A “sound” output was a “voice” mode. An “image” mode produced either a still or moving picture. This was mostly a restatement of current FCC practice in different words. While there are some questions presented by modes such as DSTAR, which has as a primary payload a “voice” sound, it also can provide geographical location information, as well as brief texts. This mode is currently a “voice” mode, and apparently legal under current PART 97 RULES. The DSTAR band width is comparable to existing “voice” emissions. On VHF, it is useful for deployment of emergency communications assets, since it can show their location on a map. There are several VHF digital voice formats fighting in this digital “Tower of Babel” for market share. All of them are mutually incompatible, and mostly proprietary systems. On the other hand, this diversity in digital modes may have bad consequences for amateur radio's reputation in emergency communication, with the proliferation of modes that are NOT INTEROPERABLE. Amateur radio often served as a “Rosetta Stone” resource for police, fire and other services that had radios that could not talk to each other. This became painfully evident on 9-11.

Anyway, all this “innovation” has all taken place under current Part 97 rules. Therefore there is no valid demonstrated barrier to innovation in the existing rules. The FCC does not pick winners or losers.

## IS AMATEUR RADIO ANY MORE MESSED UP THAN COMMERCIAL BROADCASTING?

Amateur radio is by its nature and origin a “legacy” service. This is also true of AM, Shortwave, and FM broadcasting. AM radio was supposed to be transformed by digital methods. Digital AM created interference from broad signals on adjacent channels. The performance was not as expected in actual use conditions. There was a large installed base of existing analog receivers. The cost and availability of new digital capable AM receivers did not promote user adoption. A few automobile manufacturers included capable receivers for a while, but that may not continue. Likewise, FM broadcasting was hyped as ripe for digital conversion. It required substantial investment at the transmitter. There was a large installed base of existing analog receivers. The cost and availability of new digital capable FM receivers did not promote user adoption. See a pattern here? For the most part, its use is for multiple programs on the same carrier frequency. Digital Radio Mondiale (DRM) was supposed to be the savior of Shortwave Broadcasting. Now the BBC, Radio Australia, and most of the other major countries have abandoned Shortwave Broadcasting in any mode. Now that Radio Shack is gone, it would be hard for an American to find a Shortwave table radio, or even an AM radio with decent performance in a regular brick and mortar store. A comment on DRM:

*“Until now DRM receivers have typically used a [personal computer](#). A few manufacturers have introduced DRM receivers which have thus far **remained niche products** due to **limited choice of broadcasts**. It is expected that the transition of national broadcasters to digital services on DRM, notably All India Radio, will stimulate the production of a new generation of affordable, and efficient receivers.”*

Source: [https://en.wikipedia.org/wiki/Digital\\_Radio\\_Mondiale](https://en.wikipedia.org/wiki/Digital_Radio_Mondiale)

Perhaps people did not want a kludge of wires going to their computer to listen to their radio, or wanted a radio that they could carry around or drive around with. Or maybe they decided that their computer could get the programming they wanted directly from the internet, instead of from an RF device. Is amateur radio similar in that many people do not want a rats nest of wires, interface boxes, and computer configuration menus just to talk on their radio?

FT8 delivered significant improvement in weak signal performance, in a narrow band width digital emission that conforms to existing Part 97 rules, and people are adopting it. Digital voice such as Codec 2 does not need any special consideration (because Part 97 is NOT impeding its use), until it demonstrates it has something affordable and technically effective to offer.

**CONCLUSION:** Not every new shiny object that comes along delivers on its claims. The times they are a-changin' and not necessarily for the better. Let's don't mess it up any more than it is now.

**PLEASE DO NOT CHANGE PART 97 RULES REGARDING BAND WIDTH OR BAND SEGMENTS OR EMISSION TABLES.**

## CANADIAN AND USA BAND PLANS ARE NOT COMPARABLE

In Paragraph 6, Page 9 Bruce Perens continues:

*“§97.305 Authorized Emission Types, §97.307 Emission Standards, and §97.309 RTTY and data emission codes. Rules Incorporating Modulation Designator Letters Which Specify the Payload or Mode are Obsolete*

*In contrast, the present rules in §97.305 through §97.309 require the use of a particular mode or data payload: television, radio, telegraphy, etc. They specify that mode as a modulation designator letter. Of course a single computer can encompass the function of all of those devices today. It is possible for a single transmission to incorporate data packets containing many different payloads. Under the old scheme, each of these payloads would have a different letter in the modulation designator, and each would be a different modulation under the law. The time when modulation designators could reflect the continuous content of a communication is past. Amateur regulations should reflect that fact.*

*Regulation-by-bandwidth plan has been implemented in Canada for at least a decade, without reports of interference by US Amateurs who share most Amateur Frequencies with Canada and are within easy range of their communication.” (NOTE: See later quote from Canada's ARRL)*

### *6.4 Canada's Plan*

*Canada's regulation-by-bandwidth very simply specifies frequency bands and the maximum permissible transmitted bandwidth within those frequencies. Within this framework, the Canadian Radio Relay League (CARL) further specifies a band-plan which suggests sections of the bands which are to be used for particular modes. CARL's band-plan is a “gentleperson's agreement” rather than a hard rule, thus allowing innovation within the existing spectrum. Below is the band and bandwidth table used by Canada. Where the maximum bandwidth is “Not Specified”, the width of the entire band would be the maximum.”*

*“6.5.1 Recommendation: Strike the current rule (emission type tables), and replace it with this one: Radio Amateurs are authorized to use any data transmission code that is documented in a disclosure that is readily available to the general public. The disclosure must be sufficient for a knowledgeable person to construct a computer program to encode and decode the digital code.”*

Like Whedbee, the petitioner in the now dismissed RM-11769, Bruce Perens has failed to research the basis for the Canadian Band Plan.

The FCC in the US has incentive licensing, and seems to support that concept recently. ARRL also seems to be in agreement, since they were the originators of the concept in the late 1960s. Prior to 1951, there was a form of incentive licensing by frequency allocation to class A and B amateur licenses.

Canada has a different form of incentive licensing, but it regulates various (fewer) license classes BY POWER LEVEL rather than band segments. Mere possession of an amplifier capable of exceeding the license class privileges is considered a rules violation in Canada.

While some may argue that the USA would have been better off by remaining a British Crown Colony, that is not a view held by most of us. But it can be argued that Canadians operating in the amateur HF

spectrum are more likely to be “gentlepersons” than Americans. You do not have to go far to find examples from the FCC enforcement records:

14.313 MHz, as Riley Hollingsworth acted on.

Glen Baxter, K1MAN

People who interfere with Police Radios

Recently LOTS of people who illegally broadcast on the FM band

And something the FCC needs to fix: 7.200 MHz (known by hams as Chalmun's Cantina)

Accordingly, Bruce Perens comments on American amateur operators:

*“This is a **tremendous problem** because it provides FCC with no source of funds for enforcement of the Amateur Service. The **almost complete lack of enforcement**, perhaps coupled with a **general breakdown of social norms that has been a trend in the U.S.**, means that there is a lot of **unlawful, interfering, uncivil and obscene operation within the Amateur spectrum**, such that it has become difficult to have a session on the air without hearing such an offense. There are continual requests for enforcement from ARRL and radio amateurs nationwide that are not acted upon, or are acted upon only after a great delay. Amateur Radio needs some new sheriffs.”*

**WAIT A MINUTE, HE JUST SAID THAT THERE WAS NO PROBLEM, AND WE COULD DO ALL THIS WITH VOLUNTARY BAND PLANS? AND HE SAID EVERYTHING WAS OK WITH THE CANADIANS, ON NEW ACDS DIGITAL OPERATIONS PROPOSED BY ARRL ON HF in RM-11708? RAC, the Canadian ARRL, seems to think otherwise:**

*“On 40m and 20m, the proposed changes would also **negatively impact DX phone operations throughout the Americas, and the rest of the world.** RAC has formally communicated our concerns to ARRL with the request that they include these concerns in their consideration of any changes to the US sub-bands.- George Gorsline, VE3YV-RAC International Affairs”*

<http://wp.rac.ca/rac-comments-on-arrrl-proposed-changes-to-us-hf-band-plans/>

AGAIN, BRUCE PERENS SAYS:

*“Amateur Radio needs some new sheriffs.”*

Which is it, self regulating, voluntary band plans are fine, or enforcement cannot keep up with it so “To have no change is unacceptable, in my opinion.”

Bruce Perens says:

*“6.5.1 Recommendation: Strike the current rule, and replace it with this one:*

*Radio Amateurs are authorized to use any data transmission code that is documented in a disclosure that is readily available to the general public. The disclosure must be sufficient for a knowledgeable person to construct a computer program to encode and decode the digital code.”*

Well, with no rules to enforce, I guess that would simplify enforcement. **If that is the way the FCC wants to go, I think the author of the code should be required to supply the program to decode it, or the hardware necessary to do so. They should also furnish without charge sufficient software and hardware to the FCC and any monitoring self regulating radio amateurs who want it.**

In FCC WT 16-239, the FCC has proposed to abolish all emission designators and band width regulations on digital emissions, and allow ACDS operation in all of the HF bands. **The FCC should not proceed with either the Perens recommendations or WT 16-239 as written.**

I reiterate here that Pactor 1 is a disclosed digital code. Pactor 2, 3, and 4 are not disclosed digital codes. They were developed for commercial Sailmail. I do not blame the developer, SCS, for not giving the code away free, after investing development costs. It is not “open source” software. Whatever emergency communications good has been done inside the ham frequency assignments, Pactor 4 does not meet the Part 97 rules, and the rules should not be rewritten to allow it to continue, except as a truly “emergency communications” mode with an FCC STA, as was recently done.

**The FCC should authorize the use of Pactor 2,3, and 4, or STANAG but to only RACES stations, under Part 97.407.** That would prevent its commercial use by non-RACES stations, and make it IMMEDIATELY legal without any need for any FCC STA at all times. A local civil defense or government organization could activate RACES operations without ANY DELAY. Others, including me, have commented in WT 16-237 and RM-11708 on this matter. ARDOP is an emerging mode that may be “open source”. Currently, the band width needed is indeterminate. STANAG is a wide band military digital mode that provides multiple sources for hardware and software support, and is interoperable with MARS and military services. **ANY of these wide band digital email and ACDS modes would fulfill the amateur service's mission of emergency communications, without all the controversial questions raised by Winlink HF email, without any Part 97 changes, other than minor changes to existing 97.407.**

**CONCLUSION: I THINK WE COULD DO JUST FINE WITH ANOTHER RILEY HOLLINGSWORTH. LET THE FCC DO ITS JOB. FINANCE THE ENFORCEMENT COSTS WITH BIGGER FINES FOR VIOLATORS, NOT BIGGER AND MORE FREQUENT BURDENSOME LICENSE RENEWAL FEES FOR LAW ABIDING AMATEUR OPERATORS. This entire comment is rife with naive, uninformed, unsupported, oversimplified, and contradictory assertions that just do not work when placed in context with existing working practices and the real world realities. PLEASE DO NOT CHANGE PART 97 RULES FOR BAND PLANS, EMISSION DESIGNATORS, OR BAND SEGMENTS.**



## PRIVATIZATION OF ENFORCEMENT & BAND PLANNING IS A NON STARTER

Bruce Perens comments on page 7:

*“The only other change I can think of is to offload the operation of enforcement to Amateur Radio organizations, such that they could bring enforcement matters before an administrative court rather than simply collect information in the hope that FCC would eventually bring enforcement. To have no change is unacceptable, in my opinion. This problem makes Amateur Radio less fun and less useful for all Amateurs, and may eventually reduce participation in Amateur radio sufficiently to endanger the viability of the Amateur service.”*

The ARRL has not been an objective participant in the recent rash of FCC rule making filings, nor is it responsive to either the membership or the amateur community as a whole. It can only claim to represent less than 20% of the amateur radio population as members by its subscription to QST magazine circulation. Many who ARE members disagree with the course ARRL has taken, and there is no accountability. The current “Amateur Auxiliary” to the FCC, otherwise known as “Official Observers” MUST be ARRL members, by their rules. If the FCC offloads enforcement to the ARRL, is membership in a PRIVATE CLUB a mandatory requirement for participation as an OO? Who collects the fines? Who do the fines go to, the FCC or ARRL? Further, there have already been consequences to allowing administrative judges with no technical background to rule on communications law. The original case of this was when a town court ruled that a home owner could not install a TV satellite reception dish on his home because they thought it was “ugly”. In another case, a neighbor sued a ham, because his television was not well designed and picked up the amateur transmissions; the FCC had to step in and protect the amateur operator from a local court who overstepped their jurisdiction. Does the FCC wish to set a legal precedent when it relinquishes regulatory authority to unqualified local courts?

The FCC has deregulated certain processes. The FCC no longer issues CB licenses, so there is nothing to revoke when there are violations. Recently, the FCC legalized “working skip”. Unless a CB emission interferes with a consumer device, the FCC does not care about CB. The only consequences were to amateur operators, who could not obtain amateur linear power amplifiers that cover 12 and 10 meters. What if we do the same for the amateur service?

On several occasions, manufacturers' self-certification of lighting devices evaded FCC regulations, until the widespread problem of interference to consumer devices. Amateur radio operators tracked down the source. With diminishing FCC resources, it is harder to shut these sellers down quickly. These devices will be out in the environment for decades. Deregulation is not always good.

Regulation of the internet is a very controversial subject, with huge costs for ECFS. The FCC has not yet been taken up the use of internet and social media recruiting terrorists. When confronted, the social media providers assert that they cannot afford the expense of monitoring and deleting accounts. The FCC should shut the whole company down, until they present an effective plan to deal with it. Market pressure from legitimate users would quickly drive them to a permanent solution. Maybe all it takes is to offer a “bounty” for reported sites. But indiscriminate deregulation does not seem to work.

**CONCLUSION: I THINK WE COULD DO JUST FINE WITH ANOTHER RILEY HOLLINGSWORTH. LET THE FCC DO ITS JOB. FINANCE THE ENFORCEMENT COSTS WITH BIGGER FINES FOR VIOLATORS, NOT BIGGER, MORE FREQUENT LICENSE RENEWAL FEES FOR LAW ABIDING AMATEUR OPERATORS, OR INVOLVING A PRIVATE “MILITIA” TO ACT ON ITS OWN AGENDA, WITHOUT LEGAL RECOURSE. PLEASE DO NOT CHANGE PART 97 RULES ON ENFORCEMENT.**

## CONCLUSIONS AND REQUESTS

Bruce Perens (page 12) states:

*“The 2.8 kHz bandwidths specified fit single-sideband voice transmissions and FreeDV digital voice.”*

This statement alone demonstrates that the entire Perens comment is not supported by FACTS showing his Codec 2 digital voice project is being adversely affected by existing regulations and is completely without merit. There is no justification to a “wrecking ball” revision to Part 97.

**CANADIAN AND USA BAND PLANS ARE NOT COMPARABLE.** They will not work within the current FCC USA incentive licensing concept. Delegating band planning to ARRL is NOT a good “voluntary” band planning method. ARRL represents less than 20% of USA amateur operators, and has been largely unresponsive to requests for change. The FCC has traditionally been the objective final arbiter, and should continue to do so.

**PRIVATIZATION OF ENFORCEMENT IS A NON STARTER. CONCLUSION: I THINK WE COULD DO JUST FINE WITH ANOTHER RILEY HOLLINGSWORTH. LET THE FCC DO ITS JOB. FINANCE THE ENFORCEMENT COSTS WITH BIGGER FINES FOR VIOLATORS, NOT BIGGER AND MORE FREQUENT LICENSE RENEWAL FEES FOR LAW ABIDING AMATEUR OPERATORS.** This entire comment is rife with naive, uninformed, unsupported, oversimplified, and contradictory assertions that just do not work when placed in context with existing working practices and the real world realities.

**PLEASE DO NOT CHANGE PART 97 RULES based on the Bruce Perens comments in 17-215.**

Many of the Perens comments address issues which are in process in the ECFS. There are already extensive **unresolved** comments and proceedings in **RM-11708, WT 16-239, and RM-11759**, which have been in process for **over 4 years**. There is no good that can come from throwing a bomb like this into the works at this point. **Ajit Pai's November 17, 2017 speech committed to resolving this sort of thing in one year.** There is nothing new of value in the Perens 17-215 comments that has not been already stated in the open rule makings.

**The FCC should immediately authorize the use of Pactor 2,3, and 4, or STANAG, but to only RACES stations, under Part 97.407.** I have previously pointed out fatal flaws and contradictions in FCC WT 16-239 in my request to stay or dismiss because HF band widths are unlimited, but VHF and UHF are fixed. Its current form should be dismissed or rewritten. RM-11759 should be dismissed, except for a compromise smaller band segment on 80 meter voice at 3.625 instead of the ARRL proposed 3.650 MHz. Here are my previous comments in those filings:  
<https://ecfsapi.fcc.gov/file/1005214251324/FCC%2016-239%20DISMISSorSTAY1.pdf>  
<https://ecfsapi.fcc.gov/file/1091422828084/filing%2016239%20changes%20to%20fcc%20part%2097%20B.pdf>

**PLEASE ACT ON THE EXISTING RULE MAKINGS, WT 16-239 and RM-11759 and end this relentless chain of related duplicative petitions.**

Respectfully submitted,

/S/

Janis Carson, AB2RA, licensed since 1959, Extra Class, ARRL member over 40 years