

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC, 20554

In the Matter of: Notice of Proposed Rulemaking WT Docket 16-239, NPRM-11708
and the associated RM-11708, RM 11759, RM-11769

Amending Part 97 of the Commission's
Rules and Regulations to Permit Greater Flexibility in Data
Communications

To the commission:

NEW COMMENTS ON FCC WT 16-239, & SIMPLIFIED AND CORRECTED EARLIER NPRM-11708 FILING

FCC PROPOSES TO ELIMINATE THE OBSOLETE BAUD RATE LIMIT; I AGREE THAT THIS INDIRECT MEANS OF REGULATING BANDWIDTH IS OBSOLETE. I AGREE THAT AN ARRL ARBITRARY 2.8 KHZ LIMIT WOULD AGAIN ONLY BE PLANNED OBSOLESCENCE, AND ONLY RESULT IN FURTHER FCC TIME AND EFFORT LATER AS NEW MODES EVOLVE. BUT WITHOUT A NEW BAND PLAN, 3 KHZ MAXIMUM OR SOMETHING LIKE IT IS NEEDED.

WITHOUT SOME LIMITS ON WHERE THIS NEW WIDE BAND DATA CAN BE LOCATED, EQUALLY EXPENSIVE INTERFERENCE ENFORCEMENT ACTIONS WILL CERTAINLY RESULT. THE FCC EFFORT SPENT ON 14.313 MHZ ISSUES WILL SEEM MINIMAL BY COMPARISON. MANY COMMENTERS HAVE SUGGESTED APPROXIMATELY 100 KHZ AT THE LOW END OF THE MAJOR HF BAND ASSIGNMENTS SHOULD HAVE A SEGMENT SET ASIDE TO CW/DATA NARROW MODES, WITH AN ADJOINING WIDE DATA SEGMENT SLIGHTLY HIGHER IN FREQUENCY. I ALSO AGREE WITH THAT, AND HAVE INCLUDED GRAPHICS OF BAND PLANS TO ACCOMPLISH THAT, WHICH ARE MOSTLY IN AGREEMENT WITH ARRL ORIGINAL FILING AND INTENT AND SHOW HOW TO ACCOMPLISH APPROXIMATELY WHAT THEY ARE REQUESTING. THIS WOULD NOT ARBITRARILY LEAVE BAND SEGMENT CHOICE AND REGULATION UP TO A PRIVATE ORGANIZATION, THE ARRL, BUT WOULD PUT IT IN THE HANDS OF THE FCC, WHERE IT BELONGS. BUT SINCE IT IS THE CURRENTLY PROPOSED ARRL BAND PLAN, THEY SHOULD AGREE ON ADOPTING IT INTO PART 97 RULES. THIS PROTECTS THE BAND ASSIGNMENTS FROM ARBITRARY AND CAPRICIOUS CHANGES WITHOUT PROPER PUBLIC INPUT.

THE FCC NEEDS TO DRAW TOGETHER THREE HIGHLY CONTENTIOUS PROCEEDINGS, NPRM-11708, RM-11759, and 11769, TO TREAT THE ENTIRE GROUP AS ONE PACKAGE OR HF ISSUES, AND EFFICIENTLY DISPOSE OF ALL OF THE ASSOCIATED ISSUES AT ONE TIME.

FCC HAS ONLY 2 ALTERNATIVES: REGULATE MAXIMUM DATA BY BANDWIDTH, OR REGULATE IT BY FREQUENCY ALLOCATION. TO DO OTHERWISE IS CHAOS. IF THE FCC IS TO REGULATE BY BAND WIDTH, I BELIEVE THAT INTERNATIONAL "GENERALLY APPLICABLE STANDARDS" SET THAT TO 2.7 TO 3 KHZ, AND THE FCC SHOULD BE IN ACCORDANCE WITH THOSE STANDARDS.

I AGREE WITH BOTH FCC AND ARRL IN SOME RESPECTS AND REQUEST THAT THE FCC REGULATE IN BOTH WAYS, BAND WIDTH MAXIMUM IN ONE BAND SEGMENT AREA, AND AND NO LIMIT ON BANDWIDTHS IN ANOTHER AREA FOR WIDE DATA.

THIS WOULD PROVIDE A SOLUTION THAT ALL PARTIES COULD LIVE WITH, ENDING THE FCC HAVING TO ARBITRATE THE CURRENT CONTENTIONS OF ALL THESE FILINGS. IT IS NOT JUST A GENERAL REQUEST FOR APPROXIMATELY 50 OR 100 KHZ SET ASIDE FOR NARROW BAND MODES, however meritorious that concept may be. ALSO, IT AGREES IN MOST PART WITH ARRL CONCEPTS, MAKING IT DIFFICULT FOR THEM TO REJECT THIS IDEA.

THIS SHOULD CATERGORICALLY HAVE NO IMPACT ON VOICE/IMAGE SEGMENTS OR THEIR CURRENT BAND WIDTH, EMISSION DESIGNATORS, OR REGULATIONS. THAT IS ANOTHER CONTENTIOUS ISSUE WHICH WAS SOUNDLY DEFEATED PREVIOUSLY IN RM-11305 AND 11306, AND THERE IS NO REASON TO REVISIT IT. ALSO, IT IS BEYOND THE SCOPE OF THE ORIGINAL REQUEST OF ARRL AND THE NPRM NOW BEFORE THE FCC. THE ONLY EXCEPTION TO THIS IS THE ARRL REQUESTS A CHANGE IN THE UPPER LIMIT OF THE NOW STYLED "CW/DATA" SEGMENT TO 3.650 MHZ. I PROPOSE TO COMPROMISE AT UPPER LIMIT OF 3.625 MHZ, WHICH GIVES WIDE DATA AND ACDS ENOUGH ROOM TO ALIGN WITH IARU REGION 2 BAND PLAN FOR THAT MODE. IT DOES TAKE AWAY 25 KHZ FROM EXTRA VOICE/DATA TO ACHIEVE THAT GOAL. I THINK IT IS A COMPROMISE ALL PARTIES CAN LIVE WITH.

IT SHOULD CATEGORICALLY HAVE NO IMPACT ON LICENSE RESTRUCTURING AS PROPOSED IN RM-11759 AND 11769. THESE SUGGEST GRANTING NOVICE AND TECHNICIAN CLASSES NEW DATA PRIVILEGES ON SEGMENTS OF 80, 40, AND 15 METERS. I, AND PROBABLY MOST OF THE REST OF US, OPPOSE A "FREE UPGRADE" TO THOSE THAT DID NOT EARN IT. IT IS AGAINST THE PRINCIPLE OF "INCENTIVE LICENSING" PUT FORTH BY THE ARRL AND THE FCC IN 1964. THIS ALSO IS BEYOND THE SCOPE OF THIS NPRM. THE ONLY ASPECT OF RM-11759 I SEEK TO INCORPORATE IS THE ONE MENTIONED ABOVE.

SPECIFICALLY, RM-11769 THE ONLY REMAINING ISSUE ADDRESSES 6 AND 2 METERS, AND IS IRRELEVANT TO THIS HF AND DATA NPRM. I WOULD PREFER FOR 11769 TO BE DISMISSED IN ITS ENTIRETY. BUT IT CANNOT BE INVOKED HERE.

ON THE NEXT PAGE I PROVIDE AN OUTLINE AND TABLE OF CONTENTS.

THE GRAPHICS IN THE BAND PLANS IS SOMETHING I RECOMMEND FOR YOU TO LOOK AT, SINCE IT SIMPLIFIES THE PROCESS OF VISUALIZING THE ALIGNMENT WITH IARU REGION 2 AND HOW TO IMPLEMENT THE BAND SEGMENTS FOR NARROW BAND CW/DATA AND WIDE BAND DATA.

NOTE THAT MY COMMENTS ADDRESS THE ISSUE CORRECTLY BY SEPARATING "ROBOT" OPERATIONS FROM "HUMAN" OPERATIONS. THIS IS THE REAL ISSUE, NOT JUST BANDWIDTH OR BAUD RATE OR EMISSION TYPE.

ADDITIONAL ITEM (SMALL BUSINESS IMPACT) WHICH OTHER COMMENTERS SEEM TO HAVE IGNORED:

FILING BY RANDAL EVANS IN RM-11708:
<https://ecfsapi.fcc.gov/file/7521315143.pdf>

"I have experienced very dependable service from the amateur radio Internet Winlink system. Its a great service because all of the other available Internet services cost money. Even when I am topside crusing the system runs automatically below deck publishing my position reports and downloading my email. I use the system for sending position reports, ordering supplies, repairs, chatting with friends and posting to facebook....I am not a amateur radio operator yet but a friend lets me use his call with a SIDD on the end....I'm for passing RM-11708 into law with no bandwidth limits."

BESIDES THE OBVIOUS UNLICENSED OPERATION, IT ALSO CAUSES ME TO EXPRESS CONCERN THAT FCC HAS NOT CONSIDERED THE LOSS OF JUST REVENUE TO SMALL BUSINESSES (REQUIRED IN ALL CASES). Those businesses would include, but not be limited to, SailMail and other HF email providers. With speeds competitive with SailMail, Pactor 4 on amateur radio would cause others to switch as this person has.

WHILE I REALIZE THAT THIS ITEM IS NOT REQUESTED IN THE GUIDANCE OF THE FCC IN THE NPRM, IT MIGHT BE LEGALLY REQUIRED TO PROPERLY SET THE MATTER TO REST.

SUMMARY and OUTLINE OF PROPOSAL TOPICS which is to serve as a TABLE OF CONTENTS
(Details of topics to presented later)

1. FCC NPRM-11708 WT-16-239 ABOLISHES BAUD RATE LIMITS, WITH NO BAND WIDTH RESTRICTION; IT DOES NOT ACCORD WITH "GENERALLY APPLICABLE STANDARDS" OR THE INTENT OF THE ORIGINAL ARRL PETITION FOR RULEMAKING INCLUDING BAND WIDTH LIMITS. HOWEVER, WITH APPROPRIATE BAND PLANS (PRESENTED HERE), IT COULD WORK. Page 4

2. FCC NPRM-11708 WT-16-239 DOES NOT ALIGN US AMATEUR BANDS WITH INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS" FOR LOCATION OF AREAS OF CERTAIN EMISSIONS WITHIN THOSE BANDS, CREATING CONFLICT WITH IARU RULES FOLLOWED BY 160 COUNTRIES REPRESENTED BY IARU. Detailed graphics. Pages 5 - 15

3. FCC NPRM-11708 WT-16-239 CURRENTLY IGNORES CONFLICT RESULTING FROM OPERATION OF AUTOMATICALLY CONTROLLED DATA STATIONS AND "AUTO RESPONDING STATIONS", STYLED HEREIN AS "ROBOTS"; IF MY PETITION AND FILING IS ADOPTED, THAT WILL BE CONTAINED WITHIN THE NEWLY ALLOCATED WIDE BAND DATA SEGMENTS, PROTECTING BOTH WIDE AND NARROW BAND DATA SIGNALS, WHETHER "ROBOT" OR "HUMAN" OPERATORS. Page 16 - 17

REFERENCED SOURCES USED IN THIS FILING, WITH WEB URLS. Page 18

CONCLUSION AND REQUEST FOR ADOPTION AND SIGNATURE Page 18

APPENDIX OF SUGGESTED WORDING FOR PART 97 TO CORRECT PROBLEMS OBSERVED UNDER CURRENT RULES, AND TO ADDRESS THE NEEDS OF THIS FILING. Page 19 - 20

1. FCC NPRM-11708 WT-16-239 ABOLISHES BAUD RATE LIMITS, WITH NO BAND WIDTH RESTRICTION; DOES NOT ACCORD WITH "GENERALLY APPLICABLE STANDARDS" OR THE INTENT OF THE ORIGINAL ARRL PETITION FOR RULEMAKING INCLUDING BAND WIDTH LIMITS.

HOWEVER, WITH APPROPRIATE BAND PLANS TO SEPARATE INCOMPATIBLE DATA MODES, IT COULD WORK WITH NO BAND WIDTH LIMITS ON WIDE BAND DATA AS LONG AS THEY ARE CONTAINED WITHIN THEIR FCC ASSIGNED SEGMENT. OTHERWISE, I FAVOR 2.8 TO 3 KHZ MAXIMUM.

IT IS CURRENT FCC PRACTICE AND "GENERALLY APPLICABLE STANDARDS" TO SEPARATE INCOMPATIBLE MODES SUCH AS VOICE/IMAGE AND CW/DATA, to prevent interference and regulatory actions and to enforce appropriate band use. Separating the narrow band CW/DATA from the NEW WIDE BAND DATA is exactly the same concept, and constitutes "generally applicable standards" for good technical reasons.

I QUOTE: "Those ARRL requests for RM-11708 state: "So, while there is some reasonable debate about the precise maximum bandwidth for data emissions at MF and HF, the number should not be much more or less than 2.8 kilohertz."

WHAT DOES THE REST OF THE WORLD DO ABOUT AMATEUR RADIO HF WIDE BAND DATA?

The IARU, which represents 160 member nations officially, has put forth a band plan recognized by the whole world's nations regulatory agencies. That qualifies as "generally applicable standards" and is referenced multiple times in this filing later in the detailed band plans. FIRST AND MOST IMPORTANTLY HERE ARE THE IARU "GENERALLY APPLICABLE STANDARDS" FOR MAXIMUM DATA BAND WIDTH AT HF:

REGION 2 (OUR USA REGION) RULES AUTHORIZE MAXIMUM DATA BANDWIDTHS OF 2700 HZ FOR ALL HF BANDS 160 THROUGH 10 METERS INCLUSIVE BELOW 29 MHZ.

<http://www.iaru-r2.org/documents/explorer/files/Plan%20de%20bandas%20%7C%20Band-plan/R2%20Band%20Plan%202013.pdf>

SEE CHARTS AT END OF THEIR DOCUMENT. CLIPS FROM THESE CHARTS APPEAR IN THIS PETITION AND FILING LATER IN THE DETAILED BAND PLAN SECTION.

IARU REGION 1 BAND PLAN HAS THE FOLLOWING "GENERALLY APPLICABLE STANDARDS":

IT DISTINGUISHES BETWEEN VARIOUS BANDWIDTHS IN ITS BAND PLANS ACCORDING TO CW AT 200 HZ, NARROW BAND DATA AT 500 HZ, AND WIDE BAND DATA AT 2700 HZ MAXIMUM. IN ABSOLUTELY NO CASE DOES IT PERMIT DATA AT A BAND WIDTH OF GREATER THAN 2.7 KHZ (2700 HZ). IT SEPARATES THE VARIOUS BANDWIDTHS BY FREQUENCY ASSIGNMENT. FCC should observe this as a good international neighbor by adopting an FCC rule in Part 97, not a voluntary band plan by a private agency (ARRL).

IARU REGION 3 BAND PLAN HAS THE FOLLOWING "GENERALLY APPLICABLE STANDARDS":

"NB: Narrow band modes including CW, RTTY, Packet and modes with similar bandwidth not exceeding 2 kHz."

TO CLARIFY: NO WIDE BAND DATA IS TO EXCEED 2 KHZ BANDWIDTH REGARDLESS OF FREQUENCIES OF OPERATION BELOW 29 MHZ.

CONCLUSION:

IARU REGION 1, 2, AND 3 COVER THE ENTIRE PLANET EARTH AND INCLUDE 160 NATIONS AS MEMBERS. I SUBMIT THAT IS GOOD CONSENSUS. THE USA WOULD BE WISE TO AT LEAST CONSIDER ALIGNMENT WITH THESE "GENERALLY APPLICABLE STANDARDS". IF NO BAND PLAN IS ADOPTED, A MAXIMUM BAND WIDTH OF 2.8 KHZ AS ARRL PROPOSED IS CORRECT.

2. FCC NPRM-11708 WT-16-239 DOES NOT ALIGN US AMATEUR BANDS WITH INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS" FOR LOCATION OF AREAS OF CERTAIN EMISSIONS WITHIN THOSE BANDS, CREATING CONFLICT WITH IARU RULES FOLLOWED BY 160 COUNTRIES REPRESENTED BY IARU.

THIS SECTION CONSISTS OF COMPARISONS OF VARIOUS IARU REGIONS, THE ORIGINAL SOURCE DOCUMENT THAT TRIGGERED ARRL PETITION FOR RULEMAKING, AND MY OWN RECOMMENDATIONS, FOR EACH AND EVERY HF BAND 160 THROUGH 10 INCLUSIVE. IT PRESENTS THAT INFORMATION IN VERY READABLE GRAPHIC FORM, INSTEAD OF EXTENSIVE CONFUSING TABLES.

160 METERS:

THERE IS NO USA BAND PLAN FOR 160 METERS. THE ARRL PETITION DID NOT REQUEST ONE.

REGION 2 (USA INCLUDED IN THIS REGION):

160 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|---------|-----------|---|
| 1800-1810 | 500 | DM | |
| 1810-1830 | 200 | CW | CW QRP Center of Activity 1812 kHz |
| 1830-1840 | 200 | CW | CW Priority for intercontinental operation (DX window) |
| 1840-1850 | 2700 | CW, SSB | SSB Priority for intercontinental operation (DX window) |
| 1850-1999 | 2700 | All modes | SSB QRP Center of Activity 1910 kHz |
| 1998-1999 | 500 | CW, DM | ACDS |
| 1999-2000 | 200 | CW | Beacons |

PLEASE NOTE THAT ACDS IS LOCATED AT THE TOP END OF THE BAND, AWAY FROM WHERE THE DESIRABLE DX WINDOWS FOR CW AND SSB ARE LOCATED. I PETITION AND COMMENT ON NPRM-11708 WT-16-239 THAT WE ADOPT THIS BAND PLAN, SUBJECT TO OUR USA EMISSION DEFINITIONS (SSB AND AM STAY AS WE HAVE THEM DEFINED IN OUR EMISSION SPEC AND DESIGNATOR TABLES IN PART 97). CLARIFICATION: ANY ACDS NARROW BAND AND CONFINED TO 1998 - 1999 ONLY. NO WIDE BAND DATA AT ALL ON THIS BAND.

WHILE THERE IS NO SUBSTANTIAL ACDS OR WIDE BAND ACTIVITIES ON 160 METERS, THERE COULD BE, ANYWHERE ON THE BAND UNDER CURRENT RULES. INCORPORATING THIS BAND PLAN INTO OUR PART 97 LAW WOULD CONFORM TO "GENERALLY APPLICABLE STANDARDS". IF ONLY IN THE BEGINNING THE ACDS AND WIDE BAND SEGMENTS HAD BEEN LOCATED AT THE TOP OF THE OTHER USA AMATEUR BANDS, IT WOULD NOT HAVE COME TO LOCATE IN THE MOST DESIRABLE WEAK SIGNAL PORTION. BUT THAT IS TOO LATE TO FIX.

PLEASE LET US CORRECT THIS MISTAKE AT LEAST FOR 160 METERS RIGHT AWAY.

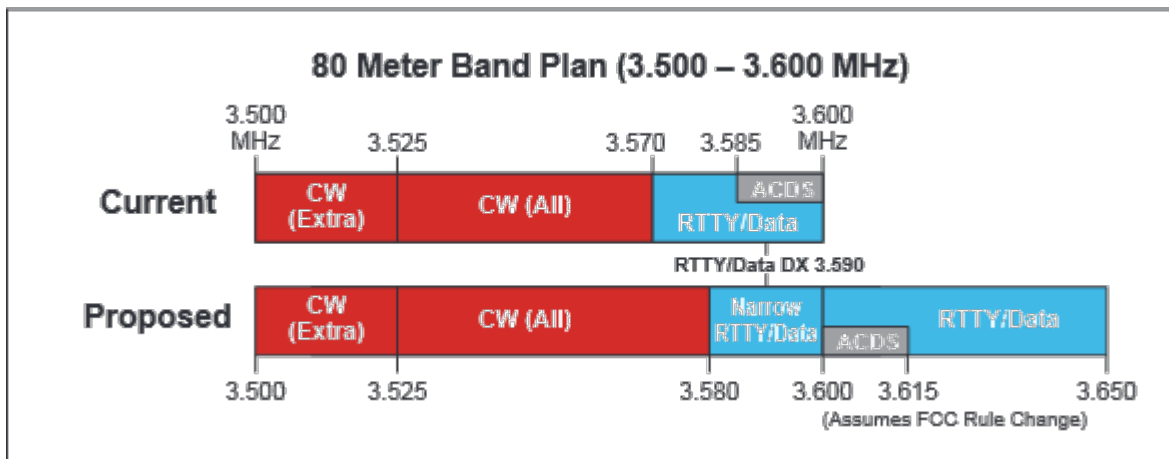
ADOPT THE BAND PLANS AS PART 97 RULES, TO MAKE THEM ENFORCEABLE.

SECTION 3: DETAILS AS CALLED FOR SUMMARY AND TABLE OF CONTENTS

2. FCC NPRM-11708 WT-16-239 DOES NOT ALIGN US AMATEUR BANDS WITH INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS" FOR LOCATION OF AREAS OF CERTAIN EMISSIONS WITHIN THOSE BANDS, CREATING CONFLICT WITH IARU RULES FOLLOWED BY 160 COUNTRIES REPRESENTED BY IARU - CONTINUED

80 METERS: THE USA BAND PLAN AND THE ARRL PETITIONED BAND PLAN ALLOCATIONS (RM-11759), SEPARATING CW, NARROW DATA, AND WIDE BAND DATA ARE SET FORTH IN:

<http://www.arrl.org/files/file/About%20ARRL/Committee%20Reports/2015/January/SUMNER%20QS4.pdf>



I PETITION AND REQUEST AND COMMENT THAT WE ADOPT (INTO PART 97 LAW) THIS PROPOSED BAND PLAN BY ARRL WITH THE FOLLOWING MODIFICATIONS:

THE REGION BETWEEN 3.57 AND 3.625 SHALL BE DESIGNATED AS THE ONLY AREA WHERE ACDS (ROBOTS) AND WIDE BAND DATA IS ALLOWED ON THE 80 METER BAND. THIS GIVES THOSE MODES NEARLY 50 KHZ, AN INCREASE TO NEARLY WHAT ARRL IS REQUESTING. RIGHT NOW, LOOKING AT THE UPPER (CURRENT) BAND PLAN, ALL OF RTTY DATA NARROW AND WIDE AND ACDS IS CONFINED TO A TOTAL OF ONLY 30 KHZ.

FROM 3.5 TO 3.57 MHZ WOULD BE ALLOTTED TO CW/DATA WITH A MAXIMUM BANDWIDTH OF 500 HZ, WITH ABSOLUTELY NO ACDS OF ANY KIND ALLOWED. NO ROBOTS, HUMANS ONLY. THIS IS NOT THE 100 KHZ THAT SOME ARE ASKING FOR. BUT A 70 KHZ SEGMENT THAT IS "HUMAN" ONLY, NO "ROBOTS" WOULD BE MUCH BETTER THAN THE CURRENT SITUATION. THE USUAL SET ASIDE AT 3.5 TO 3.525 FOR EXTRA CW/NARROW DATA WOULD APPLY.

NO ONE GETS EVERYTHING THEY WANT IN THIS COMPROMISE, BUT THAT IS THE HALLMARK OF A GOOD TREATY OR NEGOTIATION.

NOTE: NOVICE/TECH STILL CW ONLY, NO DATA OF ANY KIND ON 80 METERS. LICENSE RESTRUCTURING MAY BE NEEDED, BUT IT OVER COMPLICATES THIS RULE MAKING PROCESS AND NEEDS TO BE HANDLED IN A SEPARATE PROCEEDING.

EXTRA VOICE/DATA OPERATORS MAY NOT TOTALLY LIKE THIS, AS REGISTERED IN THEIR COMMENTS ON RM-11759. HOWEVER, IF THERE IS NOT AN IMMEDIATE ADJUSTMENT OF THIS TYPE, CW OPERATIONS ARE LEGAL IN THE WHOLE BAND, AND THEY MAY WELL SEEK REFUGE FROM GROWING ACDS AND DATA INTERFERENCE IN THE VOICE/DATA SUB BANDS. YOU ARE ONLY DELAYING THE INEVITABLE. IT WOULD BE BETTER TO RESOLVE THIS AMICABLY NOW.

SECTION 3: DETAILS AS CALLED FOR SUMMARY AND TABLE OF CONTENTS

2. FCC NPRM-11708 WT-16-239 DOES NOT ALIGN US AMATEUR BANDS WITH INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS" FOR LOCATION OF AREAS OF CERTAIN EMISSIONS WITHIN THOSE BANDS, CREATING CONFLICT WITH IARU RULES FOLLOWED BY 160 COUNTRIES REPRESENTED BY IARU - CONTINUED

HERE IS THE IARU REGION 2 80 METER BAND PLAN. IT SHOULD BE CLEAR THAT THE ARRL PROPOSAL, AS AMENDED HERE, FIXES THE PROBLEM THAT FCC NPRM-11708 WT-16-239 DOES NOT ALIGN US AMATEUR BANDS WITH INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS" AS WRITTEN.

NOTE THAT THE WIDE BAND DATA AND ACDS ARE ALL LOCATED CONGRUENTLY TO THE ARRL BAND PLAN BETWEEN 3600 AND 3625.

NOTE THAT THEIR NARROW BAND DATA IS LOCATED CONGRUENTLY FROM 3.58 TO 3.60 MHZ.

MY SIMPLIFIED PROPOSAL IS THAT CW/NARROW DATA OF 500 HZ OR LESS OCCUPY 3.5 TO 3.57 MHZ, WITH THE USUAL SET ASIDE AT 3.5 TO 3.525 FOR EXTRA CW/NARROW DATA.

80 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|----------|-----------|--|
| 3500-3510 | 200 | CW | Priority for intercontinental operation (DX window) |
| 3510-3560 | 200 | CW | CW QRS Center of Activity 3555 kHz, CW contest preferred |
| 3560-3580 | 200 | CW | CW QRP Center of Activity 3560 kHz |
| 3580-3590 | 500 | CW, DM | |
| 3590-3600 | 500 | CW, DM | ACDS |
| 3600-3625 | 2700 (*) | All modes | ACDS |
| 3600-3650 | 2700 | All modes | SSB contest preferred |
| 3650-3700 | 2700 | All modes | SSB QRP Center of Activity 3690 kHz |
| 3700-3775 | 2700 | All modes | SSB contest preferred, Image Center of Activity 3735 kHz, Emergency Center of Activity 3750 kHz |
| 3775-3800 | 2700 | All modes | Priority for intercontinental operation (DX window) |
| 3800-3875 | 2700 | All modes | |
| 3875-3900 | 2700 (*) | All modes | Image Center of Activity 3845 kHz, AM Center of Activity 3885 kHz, Emergency Center of Activity 3985 kHz |
| 3900-4000 | 2700 | All modes | |

YOU CAN NOW COMPARE REGION THE USA ARRL PROPOSAL AND THE REGION 2 BAND PLAN WITH REGION 1 (EUROPE AND OTHERS) :

80 m Band:

| | | | |
|---------------|-------|---|--|
| 3 500 – 3 510 | 200 | CW, priority for intercontinental operation | |
| 3 510 – 3 560 | 200 | CW, contest preferred, | 3 555 kHz – QRS Centre of Activity |
| 3 560 – 3 570 | 200 | CW, | 3 560 kHz – QRP Centre of Activity |
| 3 570 – 3 580 | 200 | Narrow band modes – digimodes | |
| 3 580 – 3 590 | 500 | Narrow band modes – digimodes | |
| 3 590 – 3 600 | 500 | Narrow band modes – digimodes, automatically controlled data stations (unattended) | |
| 3 600 – 3 620 | 2 700 | All modes - digimodes, automatically controlled data station (unattended), (*) | |
| 3 600 – 3 650 | 2 700 | All modes, SSB contest preferred, 3 630 kHz – Digital Voice Centre of Activity, (*) | |
| 3 650 – 3 700 | 2 700 | All modes, | 3 690 kHz – SSB QRP Centre of Activity |
| 3 700 – 3 775 | 2 700 | All modes, SSB contest preferred | |
| | | | 3 735 kHz – Image Centre of Activity |
| | | | 3 760 kHz – Reg 1 Emergency Centre of Activity |
| 3 775 – 3 800 | 2 700 | All modes, SSB contest preferred, priority for intercontinental operation | |

NOTE THAT FOR WIDE BAND DATA, AGAIN CONGRUENCE OCCURS AT 3.6 TO 3.62 MHZ. WHILE NARROW ACDS IS ALLOWED AS FAR DOWN AS 3.58, THAT ALSO AGREES WITH THE ARRL PROPOSED BAND PLAN, IF IT IS COMPROMISED AT 3.625 UPPER LIMIT INSTEAD OF 3.65, AS PROPOSED IN RM-11759. THIS MIGHT BE A SOLUTION EXTRA VOICE OPERATORS COULD LIVE WITH.

IARU REGION 2 CW/NARROW DATA IS THEN ESSENTIALLY THE SAME AS OURS.

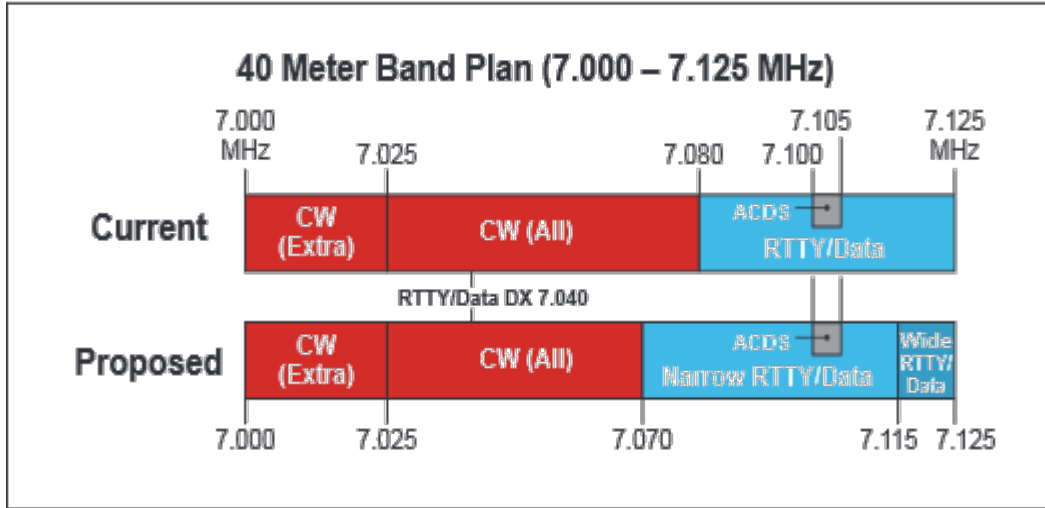
SO MY PROPOSAL TO ADOPT THE ARRL 80 METER PROPOSED BAND PLAN, WITH MY MODIFICATION, SOLVES ALL THESE INCONSISTENCIES WHILE SATISFYING THE FCC DESIRE TO HAVE NO BAND WIDTH LIMIT ON WIDE BAND DATA. AND IT STILL CONFORMS TO INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS".

NOTE: NOVICE/TECH STILL CW ONLY, NO DATA OF ANY KIND ON 80 METERS. LICENSE RESTRUCTURING MAY BE NEEDED, BUT IT OVER COMPLICATES THIS RULE MAKING PROCESS AND NEEDS TO BE HANDLED IN A SEPARATE PROCEEDING.

60 METERS IS A SPECIAL CASE THAT IS VERY COMPLICATED. NO WIDE DATA OR ACDS IS ALLOWED THERE. IT SHOULD BE COVERED BY A SEPARATE RULE MAKING IF THIS BAND IS EVER TAKEN UP FOR CONSIDERATION. I PROPOSE NO 60 METER CHANGES BE LINKED TO THIS NPRM-11708, WT16-239, RM-11759, OR RM-11769.

60 METERS WILL LIKELY BE BROUGHT UP IN A FUTURE RULEMAKING THAT INTRODUCES NEW NON CHANNELIZED ASSIGNMENTS AT A LOWER POWER OF 15 WATTS. ANY NECESSARY ADJUSTMENTS CAN BE MADE THEN, WITHOUT COMPLICATING NPRM-11708 AND WT 16-239.

LET US CONTINUE WITH 40 METERS. THE ARRL HAS PROPOSED, AND THE CURRENT USA BAND PLAN IS LIKE THIS:



IT LEAVES THE ACDS AT 7.1 TO 7.105, BUT MOVES THE WIDE BAND DATA UP TO 7.125, WHICH WOULD HELP INTERFERENCE PROBLEMS. I PROPOSE THAT FCC ADOPT THIS PROPOSED BAND PLAN WITH THE PROVISIO THAT ACDS STATIONS ON 40 METERS BE CONFINED BY PART 97 STATUTE TO THE 7.1 TO 7.105 SEGMENT AND LIMITED TO NARROW EMISSION ONLY. WIDE BAND DATA WOULD BE ONLY PERMITTED IN THE 7.115 TO 7.125 SEGMENT, WHERE THEY COULD ALSO BE ACDS. NOTE FOR CLARITY THAT THIS PROHIBITS BY PART 97 LAW ANY ACDS BELOW 7.1 MHZ, INCLUDING "AUTO RESPONDING STATIONS" OR "ROBOTS" OR UNATTENDED OF ANY KIND. NOTE: NOVICE/TECH STILL CW ONLY, NO DATA OF ANY KIND ON 80 METERS. LICENSE RESTRUCTURING MAY BE NEEDED, BUT IT OVER COMPLICATES THIS RULE MAKING PROCESS AND NEEDS TO BE HANDLED IN A SEPARATE PROCEEDING. NO CHANGES TO VOICE/IMAGE. 7.0 TO 7.025 STILL EXTRA CW/DATA 500 HZ MAX

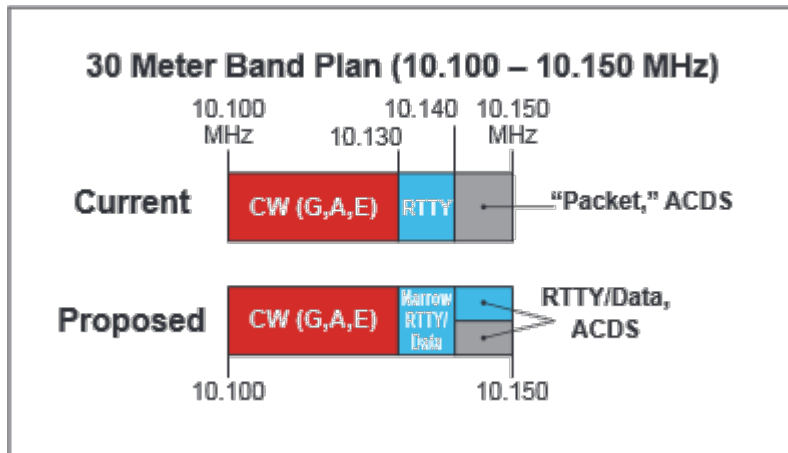
IT WILL BE MUCH MORE DIFFICULT TO GET CORRELATION WITH INTERNATIONAL BAND ALLOCATIONS ON 40 METERS. BUT ONE THING IS CLEAR: REGION 2 DOES SEPARATE THE NARROW BAND DATA FROM THE WIDE BAND DATA, AND ONLY ALLOWS A MAXIMUM OF 2.7 KHZ FOR DATA. THAT IS STILL CLEARLY A "GENERALLY APPLICABLE STANDARD."

THE REGION 2 (INCLUDES USA) BAND PLAN IS THIS (UP TO 7200):

40 m Band:

| | | | |
|---------------|-------|--|--|
| 7 000 – 7 040 | 200 | CW, | 7 030 kHz – QRP Centre of Activity |
| 7 040 – 7 047 | 500 | Narrow band modes – digimodes | |
| 7 047 – 7 050 | 500 | Narrow band modes – digimodes, automatically controlled data stations (unattended) | |
| 7 050 – 7 053 | 2 700 | All modes – digimodes, automatically controlled data stations (unattended) (*) | |
| 7 053 – 7 060 | 2 700 | All modes – digimodes | |
| 7 060 – 7 100 | 2 700 | All modes, SSB contest preferred | |
| | | | 7 070 kHz – Digital Voice Centre of Activity |
| | | | 7 090 kHz – SSB QRP Centre of Activity |
| 7 100 – 7 130 | 2 700 | All modes, | 7 110 kHz – Reg 1 Emergency Centre of Activity |
| 7 130 – 7 175 | 2 700 | All modes, SSB contest preferred, 7 165 kHz – Image Centre of Activity | |
| 7 175 – 7 200 | 2 700 | All modes, SSB contest preferred, priority for intercontinental operation | |

LET US CONTINUE WITH 30 METERS. THE ARRL HAS PROPOSED, AND THE CURRENT USA BAND PLAN IS LIKE THIS:



THE REGION 2 BAND PLAN IS LIKE THIS:

30 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|---------|--------|-------------------------------------|
| 10100 - 10130 | 200 | CW | CW QRP Center of Activity 10116 kHz |
| 10130 - 10140 | 500 | CW, DM | ACDS |
| 10140 - 10150 | 2700 | CW, DM | |

Footnotes

1 - CW Beacons should be avoided.

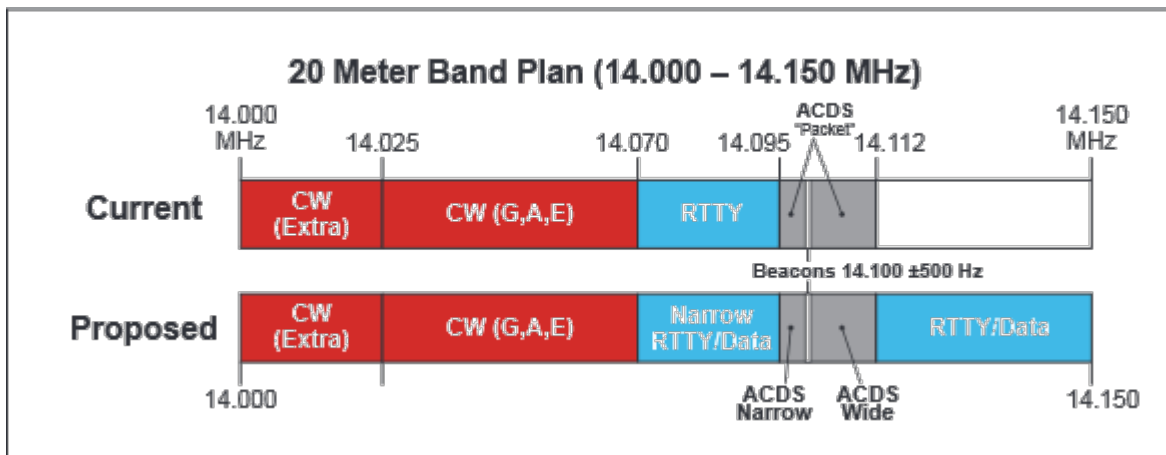
AGAIN, THE ARRL PROPOSED BAND PLAN THEY FILED FOR RM-11708 IS CONGRUENT WITH THE REGION 2 BAND PLAN. THIS IS A VERY NARROW BAND AND REQUIRES SPECIAL TREATMENT.

I PROPOSE AGAIN THAT THE ACDS AND WIDE DATA BE CONFINED TO THE ARRL SUGGESTED SEGMENT OF 10.140 TO 10.150. NO LIMIT ON BAND WIDTH, BUT ALL OF IT MUST BE CONTAINED WITHIN THAT SEGMENT. ALSO NO ACDS OUTSIDE THAT SEGMENT. IT MIGHT MAKE MORE SENSE TO FOLLOW THE ARRL PROPOSAL TO LIMIT WIDE DATA TO 2.8 KHZ OR 3 KHZ ON THIS BAND, TO ALLOW STANAG.

ALSO CW/NARROW DATA FROM 10.1 TO 10.14, NO ACDS OR "AUTO RESPONDING STATIONS".

THIS STILL CONFORMS TO INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS".

LET US CONTINUE WITH 20 METERS. THE USA AND ARRL PROPOSED CHANGES ARE:



THE IARU REGION 2 BAND PLAN IS:

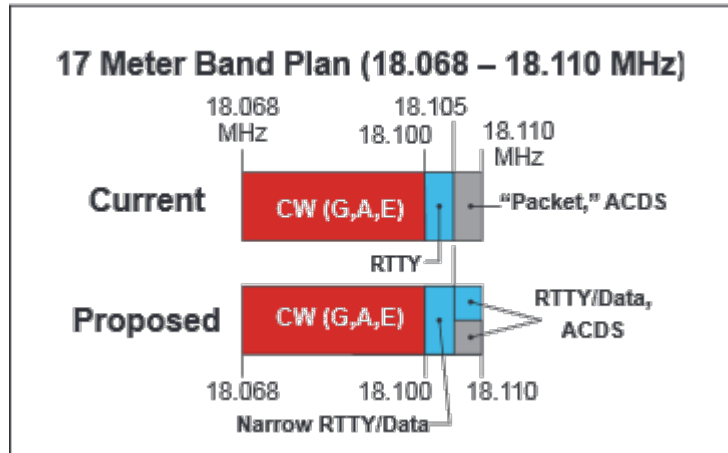
20 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|----------|-----------|---|
| 14000-14025 | 200 | CW | Priority for intercontinental operation (DX window) |
| 14025-14060 | 200 | CW | CW Contests preferred, CW QRS Center of Activity 14055 kHz |
| 14060-14070 | 200 | CW | CW QRP Center of Activity 14060 kHz |
| 14070-14089 | 500 | CW, DM | |
| 14089-14099 | 500 | CW, DM | ACDS |
| 14099-14101 | 200 | CW | IBP (exclusive) |
| 14101-14112 | 2700 | All Modes | ACDS |
| 14112-14190 | 2700 | All Modes | SSB Contest preferred |
| 14190-14200 | 2700 | All Modes | SSB Priority for intercontinental operation (DX window), SSB Contest preferred |
| 14200-14285 | 2700 | All Modes | SSB Contest preferred, Image Center of Activity 14230 kHz, SSB QRP Center of Activity 14285 kHz |
| 14285-14300 | 2700 (*) | All Modes | AM Calling QRG 14285 kHz |
| 14300-14350 | 2700 | All Modes | Global Emergency Center of Activity 14300 kHz |

THIS SIDE BY SIDE COMPARISON SHOWS A CONSIDERABLY WIDER AREA (CURRENTLY LEGAL UNDER USA LAW) FOR WIDE BAND DATA. IT MAY CONFLICT WITH NEARBY FOREIGN VOICE IN THE REGION 14.112 TO 14.150, BUT THAT MAY ALREADY BE OCCURRING.

I PROPOSE THAT FCC FORMALIZE IN PART 97 LAW THAT ACDS AND WIDE BAND DATA ONLY OPERATE FROM 14.101 TO 14.150. ALSO, NARROW BAND DATA WITH ACDS IS PERMITTED FROM 14.095 TO 14.099. BUT NO DATA FROM 14.099 TO 14.101 TO AVOID BEACONS. 14.0 TO 14.095 SHOULD BE CW/NARROW DATA 500 HZ MAX, NO ACDS, NO "AUTO RESPONDING STATIONS". THE USUAL 14.0 TO 14.025 FOR EXTRA CONTINUES.

LET US CONTINUE WITH 17 METERS. THIS IS A SPECIAL NARROW BAND. THE ARRL PROPOSAL AND DURRENT USA BAND PLAN ARE AS FOLLOWS:



THE REGION 2 IARU IS:

17 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|---------|-----------|--|
| 18068-18095 | 200 | CW | CW QRP Center of Activity 18086 kHz |
| 18095-18105 | 500 | CW, DM | |
| 18105-18109 | 500 | CW, DM | ACDS |
| 18109-18111 | 200 | CW | IBP (exclusive) |
| 18111-18120 | 2700 | All modes | ACDS |
| 18120-18168 | 2700 | All modes | QRP Center of Activity 18130 kHz, Global Emergency Center of Activity 18160 kHz |

NOTE FIRST THAT THE REGION 2 WIDER DATA IS ONLY 2.7 KHZ. DUE TO THE SIZE OF 17 METERS OVERALL, NO UNLIMITED BAND WIDTH WIDE DATA SHOULD BE PERMITTED THIS BAND. A LIMIT OF 3 KHZ FOR STANAG SHOULD BE THE MAXIMUM CONSIDERED. IT WOULD BE PREFERABLE TO KEEP ALL ACDS AND WIDE DATA OFF THIS BAND DUE TO ITS SIZE.

ACDS AND 3 KHZ WIDE DATA SHOULD ONLY BE ALLOWED 18.111 - 18.120, IF IT IS PERMITTED AT ALL.

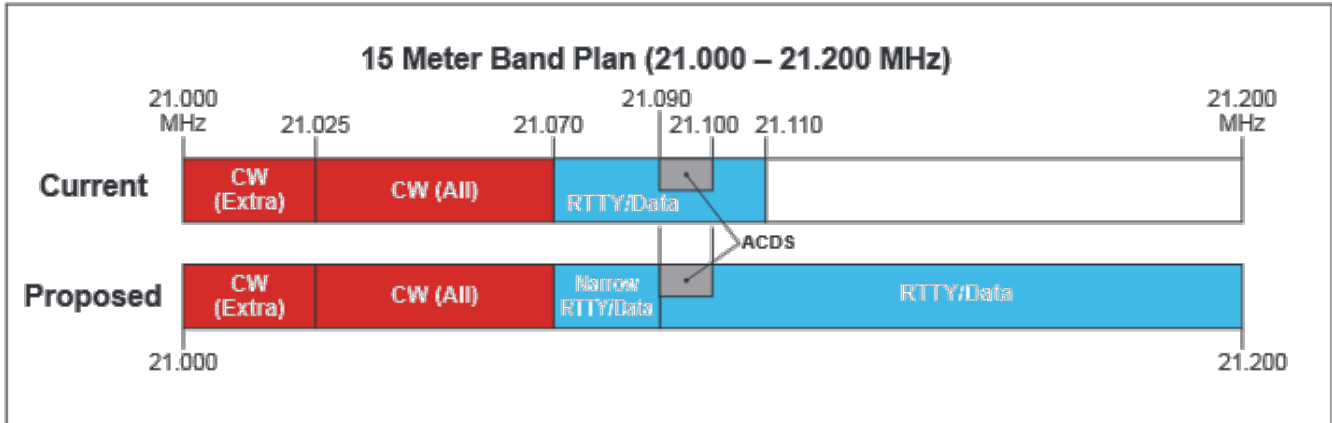
18.068 - 18.109 CW/NARROW 500 HZ MAX AND NO ACDS OR "AUTO RESPONDING STATIONS"

18.120 - 18.168 VOICE/IMAGE NO ACDS OR DATA.

CW IS STILL LEGAL ON ALL AMATEUR FREQUENCIES, TO ALLOW CW FOR ID

IT STILL CONFORMS TO INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS".

LET US CONTINUE WITH 15 METERS. THE USA AND ARRL PROPOSED BAND PLANS ARE:



THE IARU REGION 2 BAND PLAN IS:

15 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|---------|-----------|---|
| 21000-21070 | 200 | CW | CW QRP Center of Activity 21060 kHz |
| 21070-21090 | 500 | CW, DM | |
| 21090-21110 | 500 | CW, DM | ACDS |
| 21110-21120 | 2700 | CW, DM | ACDS |
| 21120-21149 | 500 | All modes | |
| 21149-21151 | 200 | CW | IBP (exclusive) |
| 21151-21450 | 2700 | All modes | SSB QRP Center of Activity 21285 kHz, Image Center of Activity 21340 kHz, Global Emergency Center of Activity 21360 kHz |

THE ARRL EXPANSION OF WIDE BAND DATA IS PRETTY AGGRESSIVE ON THIS BAND AND MAY HAVE IMPACT ON VOICE MODES IN FOREIGN COUNTRIES. FOR ABOUT 1/2 OF THE SUNSPOT CYCLE, THIS BAND MAY NOT HAVE THAT MUCH USE FOR ACDS STORE AND FORWARD OPERATIONS. I DO NOT UNDERSTAND THEIR THINKING. HOWEVER, IT DOES OFFER RELIEF TO CW AND NARROW BAND DATA OPERATORS IN THE USA, BY MOVING ALL WIDE BAND OPERATIONS ABOVE 21.090.

CONGRUENCE OF THE ARRL BAND PLAN PROPOSAL IS VERY GOOD WITH THE IARU REGION 2 BAND PLAN FOR CW/NARROW BAND DATA 500 HZ MAX FROM 21.0 TO 21.090. THAT IS WHY I PETITION AND COMMENT THAT WE ADOPT THIS ARRL PROPOSAL, WITH THE FOLLOWING PROVISIONS:

21.0 TO 21.090 IS 500 HZ MAX CW/NARROW DATA. NO ACDS OR "AUTO RESPONDING STATIONS".

21.090 TO 21.200 IS WIDE BAND DATA, NO LIMIT, WITH ACDS OR AUTO RESPONDING OK.

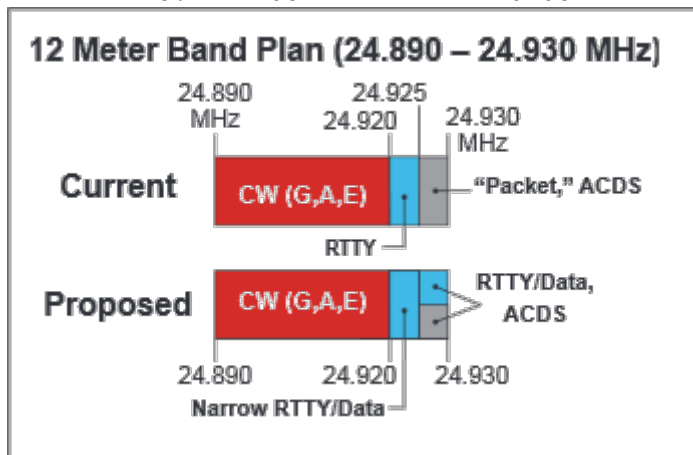
21.0 TO 21.025 STILL EXTRA ONLY.

VOICE/IMAGE ASSIGNMENTS STILL NO CHANGE.

NOTE: NOVICE/TECH STILL CW ONLY, NO DATA OF ANY KIND ON 80 METERS. LICENSE RESTRUCTURING MAY BE NEEDED, BUT IT OVER COMPLICATES THIS RULE MAKING PROCESS AND NEEDS TO BE HANDLED IN A SEPARATE PROCEEDING.

MY PETITION AND COMMENT STILL CONFORMS TO INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS".

LET US CONTINUE WITH 12 METERS. THE USA AND ARRL PROPOSED BAND PLANS ARE:



THE IARU REGION 2 BAND PLAN IS:

12 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|---------|-----------|--------------------------------------|
| 24890-24915 | 200 | CW | CW QRP Center of Activity 24906 kHz |
| 24915-24925 | 500 | CW, DM | |
| 24925-24929 | 500 | CW, DM | ACDS |
| 24929-24931 | 200 | CW | IBP (exclusive) |
| 24931-24940 | 2700 | All modes | ACDS |
| 24940-24990 | 2700 | All modes | SSB QRP Center of Activity 24950 kHz |

12 METERS IS TOO SMALL TO PROVIDE FOR ACDS. THE LARGER ALLOCATION AT 15 METERS PROPOSED IS PLENTY. THIS BAND ONLY IS RELIABLY ACTIVE ABOUT 20% OF THE SUNSPOT CYCLE. LITTLE BENEFIT WILL ACCRUE BY ALLOWING ACDS AND ESPECIALLY WIDE BAND DATA ON 12 METERS. I PERSONALLY PREFER NOT TO ALLOW EITHER ON 12 METERS.

BUT WE ARE TRYING TO GET THINGS DONE HERE, SO I PETITION AND COMMENT THAT FCC ADOPTS THE ARRL BAND PLAN PROPOSAL, WITH THE FOLLOWING PROVISOS:

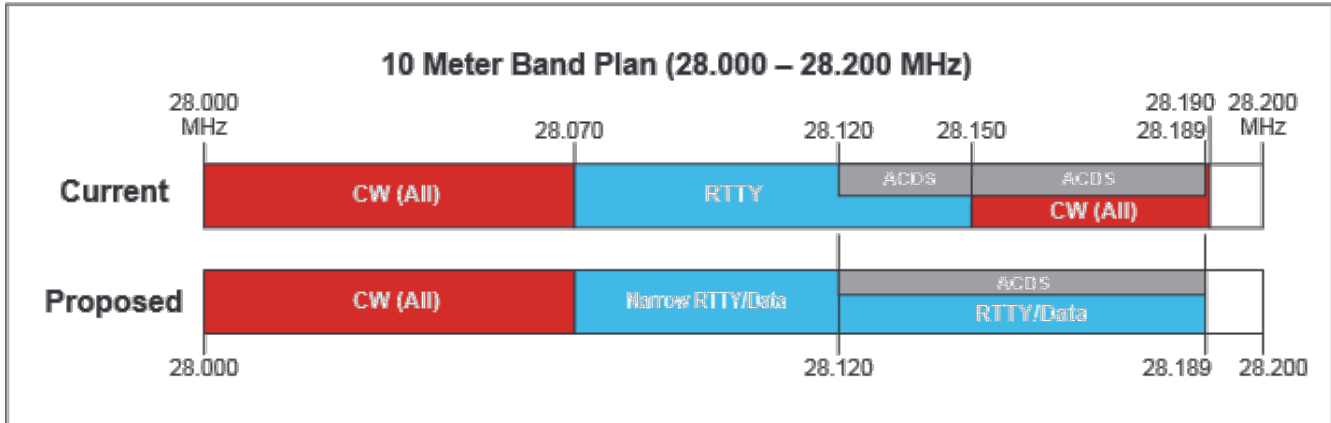
PART 97 ONLY ALLOWS ACDS OR WIDE BAND DATA UP TO 3 KHZ FROM 24.925 TO 24.930.

PART 97 ALLOWS CW AND NARROW 500 HZ DATA FROM 24.980 TO 24.925 BUT NO ACDS OR AUTO RESPONDING STATIONS.

NO CHANGES TO VOICE/IMAGE ON 12 METERS.

MY PETITION AND COMMENT STILL CONFORMS TO INTERNATIONALLY RECOGNIZED "GENERALLY APPLICABLE STANDARDS" BY SEPARATING THE INCOMPATIBLE MODES.

LET US END WITH 10 METERS. THIS IS THE ARRL PROPOSED BAND PLAN AND THE USA PLAN:



THIS IS THE IARU REGION 2 BAND PLAN:

10 METERS

| Frequencies (kHz) | BW (Hz) | Mode | Applications and observations |
|-------------------|---------|-----------|---|
| 28000-28070 | 200 | CW | CW QRS Center of Activity 28055 kHz, CW QRP Center of Activity 28060 kHz |
| 28070-28120 | 500 | CW, DM | |
| 28120-28150 | 500 | CW, DM | ACDS |
| 28150-28190 | 500 | CW, DM | |
| 28190-28225 | 200 | CW | Beacons, IBP (exclusive) 28199-28201 kHz |
| 28225-28300 | 2700 | All modes | Beacons |
| 28300-28320 | 2700 | All modes | ACDS |
| 28320-29000 | 2700 | All modes | DV Center of Activity 28330 kHz, SSB QRP Center of Activity 28360 kHz, Image Center of Activity 28680 kHz |
| 29000-29200 | 6000 | All modes | AM preferred |
| 29200-29300 | 6000 | All modes | ACDS |
| 29300-29510 | 6000 | All Modes | Satellite |
| 29510-29520 | | | Guard band, no transmission allowed |
| 29520-29590 | 6000 | FM, DV | Repeater inputs (exclusive) (9 channels of 10 kHz from 29520-29590 kHz) |
| 29590-29620 | 6000 | FM, DV | FM calling QRG 29600 kHz |
| 29620-29700 | 6000 | FM, DV | Repeater outputs (9 channels of 10 kHz from 29620 to 29690 kHz) |

THERE ARE SIGNIFICANT DISCREPANCIES BETWEEN THE REGION 2 AND THE USA BAND PLANS FOR ACDS. BUT I PETITION AND COMMENT THAT WE SHOULD FORMALIZE THE ARRL PROPOSED BAND PLAN IN PART 97 RULES ANYWAY, PROVIDING:

NO CHANGES TO VOICE/IMAGE OR NOVICE OR EXTRA EXISTING ASSIGNMENTS.

ALL WIDE DATA AND ACDS CONTAINED WITHIN 28.120 AND 28.189.

CW/NARROW DATA 500 HZ MAX 28.0 TO 28.120, NO ACDS OR AUTO-RESPONDING (ROBOTS).

3. FCC NPRM-11708 WT-16-239 CURRENTLY IGNORES CONFLICT RESULTING FROM OPERATION OF AUTOMATICALLY CONTROLLED DATA STATIONS AND "AUTO RESPONDING STATIONS" (ROBOTS). IF THIS COMMENT AND ITS BAND PLAN IS ADOPTED AS PART 97 RULES, ROBOTS WILL BE CONTAINED WITHIN THE NEWLY ALLOCATED WIDE BAND DATA SEGMENTS REGARDLESS OF EMISSION BAND WIDTH, PROTECTING BOTH WIDE AND NARROW BAND DATA OPERATIONS.

THE FCC WILL NOT HAVE TO REVISIT THIS WHOLE ISSUE IN A SHORT TIME TO INCLUDE A NEW DATA MODE, BECAUSE AS LONG AS THE NEW EMISSION MEETS CERTAIN BASIC REQUIREMENTS, AND FITS IN THE WIDE BAND DATA FREQUENCY ALLOCATIONS DISCUSSED PREVIOUSLY, NO MORE RULINGS ARE NEEDED SOON. FACTOR 4, STANAG, AND MANY OTHER POSSIBILITIES ARE REALIZED WITHOUT ANY MORE EXPENSIVE WRANGLING ABOUT WHETHER 2.7 KHZ OR 3 KHZ IS NOW THE CORRECT NUMBER.

THE NARROW BAND CW/DATA PEOPLE (HUMANS) DO NOT CARE WHAT GOES ON IN THE WIDE BAND DATA (ROBOT) AREAS ANY MORE, BECAUSE IT IS NOT BOTHERING THEM.

THE VOICE/DATA PEOPLE DO NOT CARE ABOUT IT BECAUSE THE CW GUYS ARE NOT UP IN THE VOICE/DATA AREAS TRYING TO ESCAPE FROM WIDE BAND DATA AND ACDS "ROBOTS". TRUE, THEY DID MAKE A SACRIFICE OF 3.6 TO 3.625 IN THE EXTRA 80 METER PHONE. BUT IT PREVENTS THE OTHER PROBLEM. IT IS A COMPROMISE THAT ALL CAN LIVE WITH. PERHAPS A LIMIT OF 3.625 WILL BE NEGOTIATED. IT HELPS ALIGN US ROBOT ALLOCATIONS WITH REGION 2.

NOTHING PRECLUDES THE ARRL NTS OR AN EMERGENCY OPERATION FROM EMPLOYING NARROW BAND CLOVER, HUMAN TO HUMAN, IN THE CW/NARROW SEGMENT, AS DEMONSTRATED IN THE RECENT ARRL "CASCADIA RISING" EMERGENCY EXERCISE. I THINK THIS IS A WIN WIN FOR NEARLY EVERYONE, EVEN THE ARRL.

AND AS WE HAVE SEEN PREVIOUSLY, IT FOLLOWS THE GENERAL PRINCIPLE OF SEPARATING INCOMPATIBLE MODES. THAT IS APPLYING "GENERALLY APPLICABLE STANDARDS".

NOTE THAT MY COMMENTS ADDRESS THAT ISSUE CORRECTLY BY SEPARATING "ROBOT" OPERATIONS FROM "HUMAN" OPERATIONS. THIS IS THE REAL ISSUE, NOT JUST BANDWIDTH OR BAUD RATE OR EMISSION TYPE.

For comparison to "generally recognized standards" here are some IARU concepts:

I REMIND YOU REGION 1 REFERS TO EUROPE, AFRICA, AND THE MIDDLE EAST. IN NO CASE DOES IT AUTHORIZE USE OF DATA BAND WIDTH IN EXCESS OF 2.7 KHZ BELOW 29 MHZ. IT STATES A GENERAL POLICY:

The term "automatically controlled data stations" includes Store and Forward stations. IARU member societies are requested to limit this activity on the HF bands.

It is recommended that any unmanned transmitting stations on HF shall only be activated under operator control except for beacons agreed with the IARU Region 1 beacon coordinator, or specially licensed experimental stations.

Unmanned transmitting stations, and operation involving unmanned transmitting stations, must adhere to the frequency and bandwidth limits of the band plan.

Amateur radio operators may transmit messages via unmanned transmitting stations during coordinated emergency, and disaster preparedness exercises, limited to the duration of such exercises, using a bandwidth not exceeding 2 700 Hz. Such communication should be announced regularly on the frequency, and radio amateurs not participating in the communication should cooperate by not transmitting on the frequency.

Region 2 band plan (which includes USA) further states:

"DM: Digital Modes: Any mode devoted to digital data communication restricted to

the specified bandwidth and application of the segment (not for Digital Voice and Internet Voice Gateways). Examples: RTTY, PSK, FSK, etc"

"ACDS:

Automatic Controlled Data Stations, including Store and Forward stations (not Digital Voice Repeaters and Internet Voice Gateways)

In the case of digital beacons, it's recommended to insert CW on the usual schedule for non-machine recognition and use narrow BW as possible.

ACDS are allowed only when directly specified on the segment (except those on board satellites and spacecraft - able to transmit on specified satellites segments - and onboard near space stations see "NSS"). Unattended operations are restricted in HF (see "Unmanned/unattended transmitting stations").

Unmanned/unattended transmitting stations:

IARU member societies are requested to limit this activity on HF bands. It is recommended that any unmanned/unattended transmitting stations on HF shall be activated only under operator control except for beacons agreed with IARU beacon coordinator or specially licensed experimental stations."

TO SUMMARIZE FOR CLARITY: NO ACDS ROBOTS OUTSIDE OF ASSIGNED SEGMENT IN REGION 2, REGARDLESS OF BANDWIDTH.

I submit that the IARU Region 2 Band Plan separates wide and narrow data modes into separate frequency assignments AND specifies a maximum of 2.7 KHz band width for wide data, and only 500 Hz for narrow data segments. That constitutes a pretty specific "GENERALLY APPLICABLE STANDARD" that FCC should observe as a good international neighbor by adopting an FCC rule in Part 97, not a voluntary band plan by a private agency to end this squabbling for territory.

THE JAPANESE HF BAND PLAN ALSO WEIGHS IN ON THIS ISSUE:

NB: Narrow-Band (up to 3kHz and A3E(<6kHz))

WB: Wide-Band (more than 3kHz)

THE BAND PLANS CONFINE DATA TO CERTAIN SEGMENTS (LESS THAN CW) AND IN NO CASE, IS ANYTHING OTHER THAN NB BELOW 29 MHZ.

MANDATORY STATION IDENTIFICATION THAT WORKS:

FCC should require all automatically controlled data stations - including "auto-responding stations" and US licensed amateurs who operate systems off shore - to list their frequencies, operating times, and control operator telephone number and email in a publicly accessible database. These stations should also be required to identify in CW once every ten minutes. This is the only way to assure offending interferers can be identified and action taken if needed. Hundreds of comments in this proceeding have demonstrated problems that have arisen from these auto-responding stations, and the lack of effective station identification that currently persists today. THERE IS COORDINATION OF 2 METER FM REPEATERS TO PREVENT INTERFERENCE. IT IS NOT BURDENSOME TO REQUIRE THE SAME OF HF ACDS DATA STORE AND FORWARD OPERATIONS. AMATEUR VHF VOICE REPEATERS IDENTIFY IN CW PERIODICALLY. MANY COMMERCIAL LAND MOBILE REPEATER SYSTEMS ALSO DO SO. HF is world wide, not local.

If you can devise some other form of ID method that is easily accessible to monitoring stations without the purchase of expensive software licenses or hardware equipment, it might be permissible to use that instead of CW, but such equipment or software certainly would have to be provided to the FCC or its designee to ensure compliance with legal requirements. I know of no such devices or software at this time. I would be pleased to support ANY effective alternative to CW ID, but we presently have none.

REFERENCES:

IARU REGION 2 BAND PLAN

Available at both links below:

http://www.hflink.com/bandplans/Region_2_MF_HF_Bandplan_Annex_1_2008.pdf

<http://www.iaru-r2.org/documents/explorer/files/Plan%20de%20bandas%20%7C%20Band-plan/R2%20Band%20Plan%202013.pdf>

ARRL DRAFT PROPOSAL HF BAND PLAN (BASIS FOR THEIR FILING ON RM-11708). PARTICULARLY VALUABLE FOR THE GRAPHICS OF ARRL PROPOSED AND CURRENT USA BAND PLANS:

<http://www.arrl.org/files/file/About%20ARRL/Committee%20Reports/2015/January/SUMNER%20QS4.pdf>

EARLIER ARRL FILING RESPONSE AND ERRATUM TO RM-11708 DATED DECEMBER 23, 2013:

<https://ecfsapi.fcc.gov/file/7521063715.pdf>

(NOTE: STILL REQUESTING 2.8 KHZ DATA MAXIMUM)

IARU REGION 1 HF BAND PLAN:

<http://www.iaru-r1.org/index.php/spectrum-and-band-plans/hf>

IARU REGION 3 BAND PLAN:

<http://www.radioamadores.org/biblio/iaru/R3-2015.pdf>

A FILING BY RANDAL EVANS IN RM-11708:

<https://ecfsapi.fcc.gov/file/7521315143.pdf>

CONCLUSION:

WHEREFORE, the foregoing considered, the undersigned respectfully moves, requests, and petitions the FCC to issue its NPRM or REPORT AND ORDER to implement the foregoing as soon as practically possible. Do not forget the small business implications mentioned. DON'T PROCRASTINATE, REGULATE!

Respectfully Submitted:

/S/

Janis Carson, Extra Class, AB2RA, licensed since 1959

DATE: AUGUST 29, 2016

APPENDIX OF SUGGESTED WORDING FOR PART 97 TO CORRECT PROBLEMS OBSERVED UNDER CURRENT RULES, AND TO ADDRESS THE NEEDS OF THIS FILING.

- 1) remove the "Emission types authorized" column from §97.305 (c)
- 2) replace all instances of (7) with (6) in §97.305 (c)
- 2) Modify §97.307 (f) as follows:

(1) No angle-modulated emission may have a modulation index greater than 1 at the highest modulation frequency.

(2) The authorized bandwidth for all emissions is 3 KHz with the exception that an A3E emission shall not exceed 8.0 KHz.

(3) The authorized bandwidth is 400 Hz. RTTY or data transmission must employ only specified digital codes listed in §97.309(a) of this part.

(4) The authorized bandwidth is 400 Hz. RTTY or data transmission must employ only specified digital codes listed in §97.309(a) of this part.

(5) The authorized bandwidth is 20 KHz. A RTTY, data or multiplexed emission using a specified digital code listed in §97.309(a) of this part may be transmitted. A RTTY, data or multiplexed emission using an unspecified digital code under the limitations listed in §97.309(b) of this part also may be transmitted.

(6) The authorized bandwidth is 100 kHz. A RTTY, data or multiplexed emission using a specified digital code listed in §97.309(a) of this part or an unspecified digital code under the limitations listed in §97.309(b) of this part may be transmitted. Spread Spectrum is also permitted.

(8) A RTTY or data emission having designators with A, B, C, D, E, F, G, H, J or R as the first symbol; 1, 2, 7, 9 or X as the second symbol; and D or W as the third symbol is also authorized.

(9) A station having a control operator holding a Novice or Technician Class operator license may only transmit a CW emission using the international Morse code.

(10) A station having a control operator holding a Novice Class operator license or a Technician Class operator license may only transmit a CW emission using the international Morse code or phone emissions J3E and R3E.

(11) Phone and image emissions may be transmitted only by stations located in ITU Regions 1 and 3, and by stations located within ITU Region 2 that are west of 130° West longitude or south of 20° North latitude.

(12) Emission F8E may be transmitted.

(13) A data emission using an unspecified digital code under the limitations listed in §97.309(b) also may be transmitted. The authorized bandwidth is 100 kHz.

A new §97.318 should be added:

a) In order to assure effective frequency sharing, all stations employing emissions not capable of being received "by ear" must possess and employ visual means (an audio spectrum or "waterfall" display) capable of clearly displaying any existing signal present within 100% of the authorized bandwidth either side of the center of the stations emissions.

Two new sections should be added to §97.221

d) Any automatically controlled station must employ a competent "frequency in use" detector capable of detecting any signal greater than -140 dBm within the authorized bandwidth plus a 25% guard band on each side of the authorized bandwidth. When any signal greater than -140 dBm is present within the detector, all transmissions from the automatically controlled station must be inhibited.

e) the licensee of an automatically controlled station must hold an Amateur Extra, Advanced, or General class license.

§97.221 (c) (2) should be modified to 400 Hz to be consistent with §97.307 (f) (3) and §97.307 (f) (4) as proposed.