

## Comments in Support of CSVHFS Petition

### Background

I am an Amateur Radio Operator and a member in good standing of the ARRL for over 10 years. I have also been intimately involved in Frequency Coordination matters, both Amateur and Commercial Broadcast and have served as past member of the ARRL Spectrum (Management) Committee. I am quite active in Weak Signal communications on the Amateur bands above 50 MHz. I am a past FM repeater owner and currently operate several "high level" FM Packet Radio "Nodes" as well.

I respectfully submit my comments in support of the Central States VHF Society Petition for Rulemaking.

Whereas, users of the 6m and up bands are experiencing encroachment by FM Repeaters, Packet Radio, ATV and other modes, and

Whereas, there is currently protection for CW only in the 6m 50.00 - 50.10 MHz and 2m 144.00 - 144.10 bands, and

Whereas, it is generally accepted in the Amateur Community that protection for a certain mode or sub-band comes from Part 97 of the Commission's rules, not from band plans or gentlemen's agreements.

This rulemaking would serve to protect certain band segments from encroachment by non-compatible modes, such as FM Repeaters, by removing them from ambiguous status and placing the Commission's strict authority upon them.

The adoption of this proposal is in the Public's convenience, interest and necessity.

### Discussion

Spectrum management is fast becoming a difficult task in some areas due to the proliferation of FM Repeaters, Amateur Television, Packet Radio and other modes. While it is accepted that these modes have their place in the Amateur Radio Service, it should be noted that the use of a particular operating mode should not preclude the use of another mode by others, especially when the two are incompatible. Leaving the coordination of Weak Signal Spectrum to "Repeater Coordinators" only serves the interests of the Repeater owners.

Further, it should be noted with respect to operators of FM, ATV, Packet and other systems, that the use of Weak Signal, EME and Satellite modes are a minority in the Amateur Community, yet these users provide valuable data on Radio Wave Propagation, Experimental Techniques and New Technologies, therefore should be afforded protection from interference from incompatible modes.

The ARRL's position seems to be that education of Amateurs is the best solution to the ongoing and increasing problem of FM, Packet and wideband "test" encroachment into Weak Signal Spectrum. With all due respect to the ARRL, education alone is not the answer. Some "teeth" need to accompany any effort to ensure proper and courteous operation in any band segment, Weak Signal or otherwise. I urge the Commission to temper any comments from the ARRL as biased towards Status Quo and FM Repeater Owners and not to give them any more weight than any other group or individual.

The comments of several indicate a fear that wideband data (ie: Packet) will be forbidden from the VHF bands. I believe the intent of the CSVHFS petition authors and the majority of those supporting it is not to disallow Packet or FM modes, rather to ensure they have a place to operate while ensuring they do not cause harmful interference to Weak Signal operations. In some areas of the country, wide band data users seem to pick any available channel without regard to incumbant segment uses. These users may or may not be "coordinated" by the efforts of regional Repeater Coordinators, the efforts of national groups such as TAPR and/or local groups. The practice of indiscriminate use of channels in certain band segments simply must stop. Packet radio use is well established in the 2m band from 144.91 through 145.09, for example. The existing users need not to spread out and use more spectrum, rather they need to find more efficient ways to share the channels they currently occupy. Protecting the segment from 144.100 through 144.600 will have minimum impact on current FM Packet networks, and as far as I can see only affect a small percentage of Packet operations, primarily APRS users who should be utilizing the existing Natinoal Packet infrastructure anyway. My comments here come from direct experience as well as plain common sense.

Segments to be protected for "Weak Signal" use (ie: SSB and CW, FM, Packet, ATV & etc. not permitted) by band:

6m 50.00 - 51.00  
2m 144.0 - 144.6, 145.8 - 146.00  
1.25m 222.00 - 222.25  
70cm 432.00 - 433.00, 435.00 - 438.00\*  
33cm 902.00 - 903.00  
23cm 1260.00 - 1270.00, 1295.00 - 1300.00  
13cm 2303.00 - 2305.00, 2400.00 - 2410.00, 2430.00 - 2438.00  
The lower 500kHz of all bands higher than 13cm.

(Note: 435 - 438 MHz is used internationally by the Amateur Satellite Service and should be protected from ALL terrestrial use, except Satellite uplinking.)

Affected section(s):

97.305(c) 6m, 2m, 1.25m, 70cm, 33cm, 23cm, 13cm

97.307(f) Addition.

Notes:

The band segments were chosen based on the current ARRL Bandplans, historic use and regional comments with extensive input from the Weak Signal Community.

97.205(b) Prohibits repeater stations from operating in 144.00 - 144.50 and 145.50 - 146.00. It affords Weak Signal operations protection from Packet Radio or FM Simplex.

In ITU Region I, 144.400-144.500 was recently allocated as a Beacon subband. 144.400 is a CW Meteor Scatter random calling frequency and 144.300 is an SSB calling frequency. There is heavy activity to about 144.425 during good band conditions and contests. By allowing the lower 600kHz of 2m to be used solely for Weak Signal work we will eventually realize two-way trans-Atlantic contacts.

144.30 - 144.50 and 145.80 - 146.00, as well as parts of 70cm and higher bands, are also internationally allocated to the Amateur Satellite Service and should continue to be allocated to both the Amateur Radio Service and Amateur Satellite Services. Further, we should be striving for continuity with international allocations, except in bands where we enjoy allocations beyond international treaty. By aligning our allocations with those of other countries we will continue to foster international good will and the advancement of the radio arts and increase the odds of trans-Pacific and trans-Pacific contacts between Amateurs.

Changes to uses in the 13cm band reflect the recent FCC reallocation of certain segments of that band.

Suggested text for changes in Part 97:

1.

"97.305(c) A station may transmit the following emission types on the frequencies indicated, as authorized to the control operator, subject to the standards specified in 97.307(f) of this part.

Wavelength band paragraph:	Frequencies	Emission Types Authorized	Standards See 97.307(f),
VHF			
6m	50.1 - 51.0	MCW, phone, test	(1), (2), (13)
-do-	51.0 - 54.0	RTTY, data, test	(5), (8)
-do-	-do-	MCW, phone, image	(1), (2)
2m	144.1 - 144.6	MCW, phone, test	(1), (2), (13)
-do-	144.6 - 148.0	RTTY, data, test	(5), (8)

-do-	-do-	MCW, phone, image	(1), (2)
1.25m	222.0 - 222.25	MCW, phone, test	(1), (2), (13)
-do-	222.25 - 225.0	RTTY, data, test	(6), (8)
-do-	-do-	MCW, phone, image	(2)
UHF			
70cm	420.0 - 432.0	RTTY, data, SS, test	(6), (8)
		MCW, phone, image	
-do-	432.0 - 433.00	MCW, phone, test	(1), (2), (13)
-do-	433.0 - 435.00	RTTY, data, SS, test	(6), (8)
		MCW, phone, image	
-do-	435.0 - 438.0	MCW, data, phone, RTTY	(1), (2)
-do-	438.0 - 450.0	RTTY, data, SS, test	(6), (8)
		MCW, phone, image	
33cm	902.0 - 903.0	MCW, phone, test	(1), (2), (13)
-do-	903.0 - 928.0	RTTY, data, SS, test	(7), (8),
		MCW, phone, image	(12)
23cm	1240.0 - 1260.0	RTTY, data, SS, test	(7), (8),
		MCW, phone, image	(12)
-do-	1260.0 - 1270.0	MCW, phone, test	(1), (2), (13)
-do-	1270.0 - 1295.0	RTTY, data, SS, test	(7), (8),
		MCW, phone, image	(12)
-do-	1295.0 - 1300.0	MCW, phone, test	(1), (2), (13)
13cm	2300.0 - 2305.0	MCW, phone, test	(1), (2), (13)
	2305.0 - 2400.0	RTTY, data, SS, test	(7), (8),
		MCW, phone, image	(12)
	2400.0 - 2410.0	MCW, data, phone, RTTY	(1), (2)
	2410.0 - 2450.0	RTTY, data, SS, test	(7), (8),
		MCW, phone, image	(12)"

2.

"97.307(f)(13) Phone emissions are limited to those types with H, J, and R as the first symbol. No non-phone emission shall exceed the bandwidth of a communications quality J3E phone emission. "

Respectfully submitted by,

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