Wayne Markis writes, "The use of this spectrum by Amateur radio operators is very sparce, (as is the 3.3-3.5 ghz band). Back
when the days that most Amateur's were pioneers in the innovation of radio science, the Amateur service has changed to become "Hobbyists" dependent on commercially built equipment. (There is no commercial equipment currently available in the 10 ghz. band in the U.S.) These "Hobbyists" expect that this spectrum continues to remain virgin to allow only them to use it, at a time and place only they decide, so as to increase the number of "Postcards" they have on their walls."

I argue that we amateurs ARE still pioneering in the radio arts. We are currently experimenting with rain and snow scatter on 10 GHz. Some use extremely creative software (WSJT) to detect other stations that are many dB BELOW the noise floor. And I'm sorry to burst anyone's bubble, but there ARE current examples of amateur radio equipment commercially manufactured for the 10 GHz band. Downeast Microwave in Florida and Kuhne Electronics in Germany provide kits and factory built equipment for 10 GHz as well as the other microwave bands that amateurs presently use, including the 3.3 to 3.5 GHz band. We amateurs are NOT the sole users of 10 GHz right now. We have secondary status already! Mimosa's proposal seeks to use the entire 10 GHz band, leaving only a small slice around our 10.368 GHz SSB calling frequency. They have completely ignored our other uses of the band, such as repeater links and amateur television.

In the *Reply to Comment* by Mimosa Networks, Inc., DATED April 25, 2014, they state, "In a typical scenario, if an amateur radio user were to seek access to a channel in the 10
GHz band for a brief period of usage (which is the most common type of amateur use of the band), and finds that the selected channel is being utilized by a fixed wireless operation, the amateur operator can select a different, clear channel. Given that amateurs will have this channel selection option at the time they seek to initiate use, they have the ability to operate on unoccupied channels."

This is a bit misleading. The majority of amateur users utilize transverter systems that convert signals for use in the 10 GHz band to signals that can be utilized by common VHF transceivers that operate in the 144-148 MHz amateur band. Therefore, amateurs are limited to the use of any 4 MHz of contiguous frequencies in the 10 GHz band. Our equipment can, and does get built to utilize any 4 MHz segment within the 10 GHz band, depending on the intended use, following ARRL established band plans. The present transverter systems use simple filters inside, made with copper plumbing parts and generally have pass band widths of 25-50 MHz. Moving more than that amount involves having to retune these filters, requiring very expensive test equipment that not many amateurs possess.

New America and Public Knowledge, in their comments receive by the Commission on April 10, 2014, contend that, "As Mimosa observes in its petition, the 10 GHz band has significant advantages for outdoor and long-distance backhaul applications because "the band is only moderately susceptible to attenuation due to rain-fading effects, especially when compared to spectrum in higher frequencies, including the 71-76 and 81-86 GHz bands."

While it may be true that the 10-10.5 GHz band is only moderately susceptible to rain fading, it is severely affected by scattering of the signals by rain and snow. The signals are broadened in bandwidth by this scattering. The wider the bandwidth of the signal, the more the signal is broadened, to the point that the distortion introduced would most likely cause decoding failures during this scattering. As amateur radio operators, myself included, have discovered, narrow mode signals such as CW (A1A Morse code) become raspy in sound, but can be copied by ear regardless of the raspy CW note in the receiver. SSB signals, which are wider than CW, are

affected even more and to the point that effective communication is entirely lost. Signals like Mimosa's, that would be many Megahertz wide to start with may be rendered completely useless during rain and snow storms. I have imbedded sound files here to demonstrate this introduced distortion.

Here is a link to a CW signal received via rain scatter:
http://www.wa1mba.org/scatter.wav

Here is a normal CW signal for comparison:
http://www.astrosurf.com/luxorion/Radio/mode-beacon-va3grr.wav

Here is a SSB signal during a rain scattering event:
http://www.enduro.idl.pl/wav/ok1jkt_SSB_RS.mp3

Here is a normal SSB signal:
http://www.w3yy.com/audio/CY9SS-80mtr-ssb.wav

Again, I wish to reiterate my position that the Commission rejects Mimosa's proposal in its entirety.

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