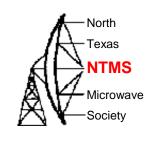
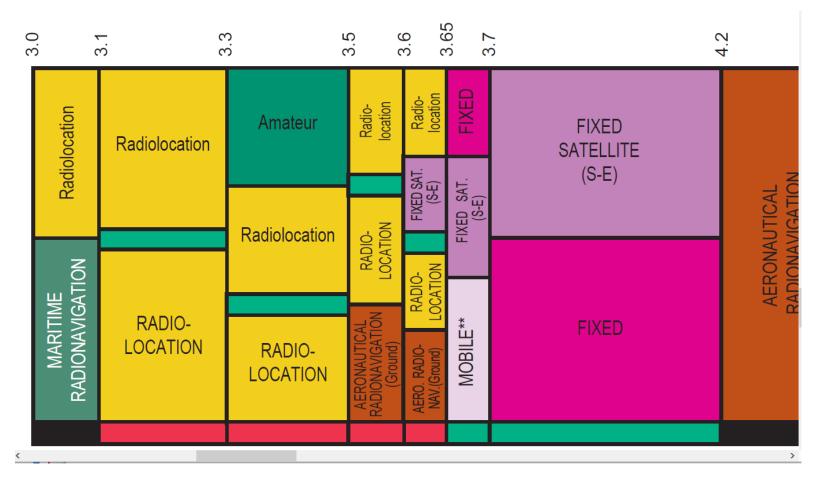


The 3300 to 3500 MHz Band

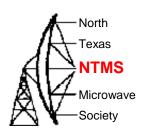
W5LUA September 5, 2020

Spectrum from 3 to 4.2 GHz





FCC NEWS 08/25/2020

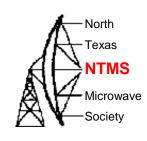


- Media Contact:
- Will Wiquist, (202) 418-0509
- will.wiquist@fcc.gov

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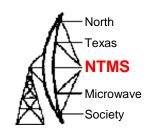
- For Immediate Release
 - FCC CONCLUDES FIRST 5G MID-BAND SPECTRUM AUCTION
- 3.5 GHz Spectrum Will Promote Innovation and Advance U.S. Leadership in 5G
- WASHINGTON, August 25, 2020—The Federal Communications Commission today announced the successful conclusion of bidding in its auction of Priority Access Licenses in the 3550-3650 MHz band. This auction, which was designated as Auction 105, made available the greatest number of spectrum licenses ever in a single FCC auction. This 70 megahertz of licensed spectrum will further the deployment of 5G, the next generation of wireless connectivity, as well as the Internet of Things and other advanced spectrum-based services.

FCC NEWS



- "This is a banner day for American leadership in 5G and for American consumers. The 3.5 GHz auction has concluded, and I can say unequivocally: It was a resounding success," said FCC Chairman Ajit Pai. "The strong demand for licenses was the direct result of this Commission's reforms to the rules for the 3.5 GHz band—reforms that would not have been possible without the leadership and hard work of my colleague, Commissioner Mike O'Rielly. This auction has been a key part of our 5G FAST Plan and our ongoing push to make more mid-band spectrum available for 5G. I look forward to this important spectrum being put to use quickly to provide service to the American people. And I look forward to the Commission making available 280 more megahertz of mid-band spectrum for 5G in the C-band auction beginning on December 8."
- According to Dave Siddall K3ZJ ARRL legal counsel, the 280 MHz to be auctioned is from the 3.7 to 3.98 GHz spectrum which is mainly satellite spectrum that now will be re-organized and shared. Here is the link that addresses Auction 107. https://docs.fcc.gov/public/attachments/FCC-20-110A1.pdf

FCC NEWS

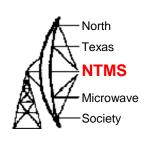


• Bidding in the auction of 70 megahertz of Priority Access Licenses (PALs) in the 3550-3650 MHz band (Auction 105) concluded today following round 76. Gross proceeds reached \$4,585,663,345, and bidders won 20,625 of 22,631, or more than 91.1%, of available licenses. The FCC will release a public notice in a few days providing detailed auction results, including the names of Auction 105 winning bidders, and announcing deadlines for payments and the filing of long-form applications, as well as other post-auction procedures needed for the prompt issuance of licenses. That information, as well as other information about Auction 105, will be available at: https://www.fcc.gov/auction/105.

5G coverage will then be from 3550 to 3980 MHz

W5HN

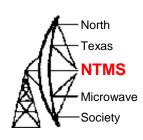
US Department of Defense to Share 3450 – 3550 MHz with 5G Commercial Operations 08/12/2020 ARRL News



- The FCC will auction sharing rights to the upper 50 MHz of the 3300 3500 MHz secondary amateur radio allocation to commercial 5G interests in the wake of the Department of Defense (DoD) agreement to share spectrum at 3450 3550 MHz. The entire band currently supports a variety of military operations, and amateur radio has a long history of peaceful coexistence with the Department of Defense as a secondary user of this spectrum.
- Late last year, the FCC proposed to delete the amateur secondary 3300 3500 MHz secondary allocation as well as the amateur-satellite allocation at 3400 3410 MHz. The FCC could auction the 100 MHz of spectrum (3450-3550 MHz) in early 2022. This latest move makes a contiguous band of spectrum from 3450 3980 MHz available for commercial 5G networks.

W5HN

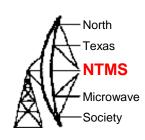
US Department of Defense to Share 3450 – 3550 MHz with 5G Commercial Operations 08/12/2020 ARRL News



- "For a number of years, the National Telecommunications and Information Administration (NTIA) and FCC have focused on the 3450 – 3550 MHz band as the spectrum most conducive to sharing with commercial users," said ARRL Washington Counsel David Siddall, K3ZJ. "Monday's statements announced that a framework for sharing has been worked out."
- In December 2019, the FCC adopted a Notice of Proposed Rulemaking (NPRM) in WT Docket 19-348 proposing to delete the 3300 – 3500 MHz secondary amateur band. ARRL strongly opposed the move in its comments on the NPRM, which put forward the FCC's plans to remove "existing non-federal secondary radiolocation and amateur allocations" in the 3300 – 3500 MHz band and to consider options for relocating incumbent non-federal operations.

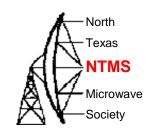
W5HN

US Department of Defense to Share 3450 – 3550 MHz with 5G Commercial Operations 08/12/2020 ARRL News



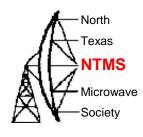
- Siddall said the spectrum below 3450 MHz presents a more difficult government/commercial sharing scenario, and that future sharing there remains uncertain. "We continue to argue that the amateur secondary allocation should not be deleted in this band," he said. "We recognize that our access is secondary, and ask only to be given a chance to use our considerable technical skills to work around whatever future uses may be implemented in this spectrum."
- The spectrum repurposing is in response to the MOBILE NOW [Making Opportunities for Broadband Investment and Limiting Excessive and Needless Obstacles to Wireless] Act, enacted in 2018 to make new spectrum available for mobile and fixed wireless broadband use.
- "Together with the spectrum being made available for 5G in the C-band as well as the 3.5 GHz band, we are now on track to have a 530-megahertz swath of mid-band spectrum available for 5G from 3.45 to 3.98 GHz," FCC Chairman Ajit Pai said in a statement. "The FCC looks forward to moving quickly to adopt service rules for the 3.45 GHz band and then hold an auction to bring this prime mid-band spectrum to market."

www.everythingrf.com/news 08/13/2020



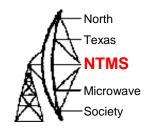
- "The United States DoD and the White House Announced that 100 MHz of contiguous mid-band spectrum in the 3450 - 3550 MHz (n78) band will be available for 5G use by the end of 2020"
- Where-as the ARRL bulletin suggests it may not happen till early 2022

What's Next?



- Dave Siddall believes that the FCC will release next week their draft "Report and Order" addressing 3.3 to 3.5 GHz (Docket 19-138)
- My read from Dave is that our whole amateur band is in great jeopardy.
- Dave is going to suggest that we keep a small portion such as 3400-3410 MHz or maybe 3395 3405 MHz for weak signal terrestrial, EME and even satellite work. This is an international allocation for countries that still have access to the 9cm band. I have communicated with amateurs in 38 countries on 9cm EME so maybe there is some hope!!
- We will probably need some guard band for potential interference to us.
- Dave is also pushing to allow us to operate through out the amateur band until commercial use of the band has begun.

ARRL Band Plan



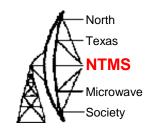
3400.000	3410.000	10.0					CW, SSB, NBFM	6 kHz or less	Amateur Satellite Communications
			3400.000	3400.300	0.3		CW, SSB, Digital	3 kHz or less	Weak Signal EME Band
			3400.300	3401.000	0.7		CW, SSB, Digital	3 kHz or less	Terrestrial Weak Signal Band - Future (Note 2)
						3400.100	CW, SSB, Digital		EME Calling Frequency
3410.000	2430.000	20.0					Analog & Digital, Including Full Duplex	>1.0 MHz	Analog & Digital; paired with 3310.0-3330.0; 100 MHz Split
3430.000	3439.000	9.0					Analog & Digital, including Full Duplex	0.1 - 1.0 MHz	Analog & Digital; paired with 3800.0-3309.0; 130 MHz Split
3439.000	3445.800	6.8					Analog & Digital, including Full Duplex	0.1 - 1.0 MHz	Analog & Digital; paired with 3339.0-3345.8; 100 MHz Split
3445.800	3452.500	6.7							Experimental
3452.500	3455.000	2.5					Analog & Digital, Including	0.05 - 0.2 MHz	Analog & Digital; paired with 3352.5-3355.0; 108 MHz Split
							Full Duplex		
3455.000	3455.500	0.5						100 kHz or less	Crossband linear translator (input or output)
3455.500	3457.000	1.5					CW, SSB, NBFM, Digital	6 kHz or less	Terrestrial Weak Signal Band - Legacy (Note 2)
						3456.100		6 kHz or less	Weak Signal Terrestrial Calling Frequency
			3456.300	3457.000	0.1		CW, Digital	1 kHz or	Propagation Beacons

Adopted by the ARRL Board of Directors in 2012

Note 2 – Weak Signal Terrestrial legacy users are encouraged to move to 3400.3 to 3401.0 MHz as time and resources permit.

I guess that never happened!

What's Next?



- Dave may be calling on us to comment. Stay tuned....
- Comments, questions, discussion?