UPDATED 10/06/2020

By John Langridge, KB5NJD

NOTE: For digital mode users, a new WSJT-x release candidate is available that will change things a bit for JT9 and WSPR users. In general FST4-60 is the replacement mode for JT9 and will be run where JT9 is currently found. FST4W-120 is the mode that is slated to replace traditional WSPR2. Run it where you normally would run WSPR2. Longer modes on skeds can probably be found in the 200 Hz slice above WSPR and below phone, that is 475.8 kHz and 476 kHz, all USB.

As of this update, there is a bit of chaos in progress with respect to FST4-60 and FST4-120. It seems a portions of the 630 meter community is using one variant and another portion is using the other. Both are still found where JT9 was, and still is to a degree, located. My advice is to listen for both and use the variant that is in use at the time. There seem to be several rationales but this is one of the problems with having choices with a large group of people.

It seems for now that FST4W plus its variants and WSPR are all located in the same spectrum. WSPR continues to maintain a strong presence, partially due to the fact that there are a lot of hardware WSPR systems out there (like the U3S) and the addition of these new modes appears to be up in the air and not a trivial task.

More details to follow at some point and this is hashed out.

There have been a lot of questions about what mode goes where on 630-meters. As there is an active community already in place on the band these standards are already established for many modes but for someone just coming on the band, that information may be difficult to find so I hope to handle some of that right now.

Under part-5 experimental rules the band has consisted of digital modes and CW. Wide band modes have really not seen much activity but since the FCC has allowed them, it was thought best to locate those modes in an area where there is not much activity with the current active community of operators. Note that this graphic also generally harmonizes with other parts of the world, including Europe, Asia, and Oceania. Having said that, here is what it looks like: UPDATED 10/06/2020

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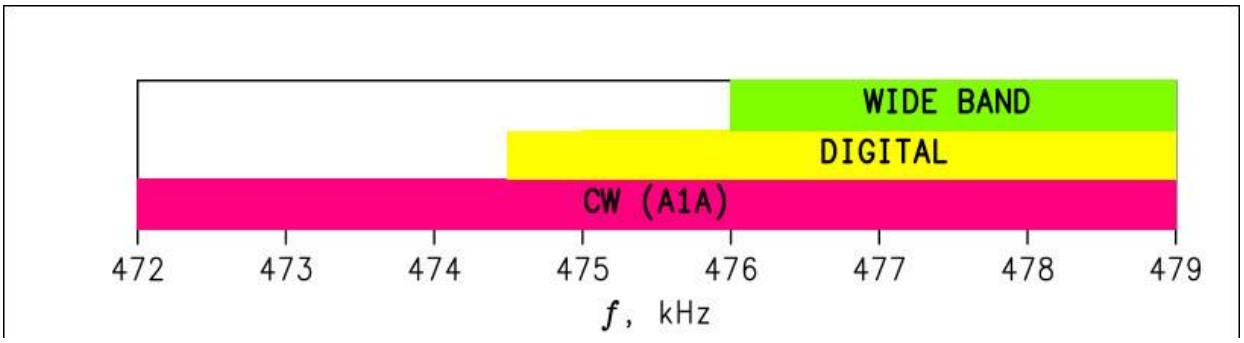

Courtesy W1FR

CW is pretty explanatory and just about all CW activity occurs below 475 kHz (carrier frequency). While I does not matter which CW passband you use (upper or lower), most 630 meter CW occurs on the opposite passband used for other low bands (40/80/160m). That means that when in CW mode, you want to be listening to the *USB* passband. Some operators may need to select CW-REV or CW-NOR, depending on their receiver as different manufacturers interpret those labels very differently. My Yaesu FT-1000 uses CW-USB and CW-LSB to describe each CW receive passband. When in doubt, check the opposite CW passband but all specified frequencies are carrier frequency. This can also be handy when QRM exists on a sideband. Again, it should not matter which you use unless you are sloppy about zero beating the signal. Then you may never be heard!

Why did we choose the USB CW passband? To harmonize with the sound card modes that use USB. There was no reason for everyone to bump into one another or try to figure out how to avoid overlap using various modes in such a narrow band.

For now, we have settled into 474.2 kHz as the CW calling frequency (carrier frequency).

Keep in mind that there is more CW activity in the Fall and Winter than in the Summer due to seasonal noise and there is typically a seasonal activity shift associated with there being less darkness during the Summer. This is a reality for any mode on the band.

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Here are additional breakdowns including popular digital modes:

WSPR: 474.2 kHz USB dial frequency, audio between 1400 – 1600 Hz

FST4W-120 (WSPR equivalant): 474.2 kHz USB dial frequency, audio between 1400 – 1600 Hz

JT9: 474.2 kHz dial frequency, audio between 1000 – 1350 Hz

FST4-60 (JT9 equivalent): 474.2 kHz dial frequency, audio between 1000 – 1350 Hz

FT4 / FT8: 474.2 kHz dial frequency, audio between 800 – 1000 Hz (can spill into JT9 area as needed – VERY little FT4 / FT8 so far)

JT65: Yet to be formalized but if high digital activity at 474.2 kHz dial frequency between 800 and 1350 Hz, move up to 475 kHz dial frequency + 1000 – 2000 Hz audio. Probably best to announce your activity somewhere. Most guys are using JT9.

WSQCALL: Extensive details on where WSQCall (ONLY version 2.00 or newer) is best used have been condensed and assembled into **this standalone document** by W0YSE.

FT8CALL / JS8CALL: In 2018, W0YSE reported that these modes were being tested on 474.2 kHz + 1700 Hz (center RF frequency of 475.9 kHz), in the same area as WSQCall.

Wide band modes are probably any mode wider than 150 Hz but there is nothing written in stone. USE GOOD JUDGEMENT and when in doubt, ask!

SSB: 476 kHz and up. Some have used 478.8 kHz LSB which seems to work well. Don't forget you need a ***linear*** amplifier! Switch-mode amps won't cut it.

SSB is new territory but the plan is in place to keep wide band modes away from narrow band modes, many of which are used to complete two-way QSO's.

Note that A2 modulated CW is illegal below 50.1 MHz so NDB transmitter users keep this in mind. WSPR is a far better beaconing method and you will receive many more reports than an unattended CW beacon.

Did I miss anything? If you need to know about where a mode should go, send me an email on the contact page or my gmail address.

Good luck!