

# A proposal for passing stations to other bands using FT8

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The advent of FT8 has greatly affected our multi-op club contesting. With so many using the FT8 mode, it has changed our ability as multi-op stations to run the bands with other stations, both single op with multiple bands and other multi-op stations. An idea came to me after the January 2020 contest that might be a viable method for facilitating queries about other bands. Of course, sometimes we know that other stations we've worked over the years have other bands but how do we get a message to them that we want to work them on another band other than just waiting until we run into them on phone or cw somewhere?

For many years we have used the shorthand notation for the VHF and up bands, ABCD9EFG....etc. Consider using a code to send along with the RRR exchange or the 73 message in an FT8 sequence, "OB?". If the idea is disseminated widely then folks would know that is a query for working other bands. Their response could then be something as simple as BV to indicate they would be available to work voice on the 2m calling frequency. If they would prefer another frequency, then the reply could be B210 to indicate 144.210 and that frequency would default as voice. A code for FT8 would just be "8" and indicate the FT8 usual frequency of 144.174, i.e. "B8". For MSK144 the code would be "4" so to indicate you want to work someone on 222 MSK144 standard frequency then send "C4". And so on. Since C is the band 222, maybe "W" could be used for requesting a CW contact and "M" for an FM contact. In each case, if no frequency is given, the assumption would be for the usual frequency for that mode. Any other frequency could be given by indicating the kHz only as the ABCD9EFG... would indicate the band in the shortest notation. Once one pass was initiated, then the operator could just put in another code on his RR exchange on the passed band to initiate a pass to yet another band.

I have generated a table of the typical messages and the usual frequencies such as AV would be voice on 50.125, AV145 would be voice on 50.145, A4 would be MSK144 on 50.260, A8 would be FT8 on 50.313, AM would be FM on 52.525. Similarly, BV would be voice on 144.200, BV215 would be voice on 144.215, B4 would be MSK144 on 144.260, B8 would be FT8 on 144.174, and BM would be FM on 144.520 and BM550 would be FM on 144.550. So on for all the bands.

I have worked up a table to the best of my abilities but have left some blank spaces for those with more info to help fill in, such as the default frequencies for the 900 MHz band. I've only ever been around .100 on 902 or 903 for SSB and CW myself. I feel sure there are some agreed upon frequencies for that band and others that I'm just not familiar with.

I hope that no one would think this is a particularly bad idea or an attempt by me to promote a band plan. It is only a suggestion for consideration and further work to help out the VHF and microwave contesting community with a problem about running bands during a contest. The shorthand notations could even be effectively used for CW passes if widely accepted. I would like that too as I'm somewhat clumsy on band passing using CW.

I had written this paper for the 2020 SVHFS conference which was canceled because of Covid. It was published later in the 2020 SVHFS Technical Journal with the other conference submissions. That Journal did not get very well dispersed. Permission was granted to submit it to this MUD conference. I think it is still a viable idea.

Proposed pass abbreviations and frequencies

Band		SSB calling	MSK freq	FT8 freq	FM freq	CW freq
	Abbeviation	V	4	8	M	W
50	A	AV 50.125	A4 50.260	A8 50.313	AM 52.525	AW 50.090
144	B	BV 144.200	B4 144.260	B8 144.174	BM 146.520	BW 144.190
222	C	CV 222.100	C4 222.260	C8 222.174	CM 223.500	CW 222.090
432	D	DV 432.100	D4 432.260	D8 432.174	DM 446.000	DW 432.090
902	92	92V 902.100				92W 902.100
903	93	93V 903.100				93W 903.100
1296	E	EV 1296.100		E8 1296.174		
2304	F	FV 2304.100		F8 2304.174		
3456	G	GV 3456.100		G8 3456.174		
5760	H	HV 5760.100		H8 5760.174		
10368	I	IV 10368.100		I8 10368.174		
24192	J	JV 24192.100		J8 24192.174		
47000	K					
122000	L					

This is just a first pass at attempting to define the pass abbreviations.  
 Not trying to initiate a band plan. Just freqs I think are in use now.