

ARIZONA VHF BAND PLAN

Arizona adopted the ARRL VHF band plan with a few minor changes and additions. This listing is provided to assist in identifying specific sub band usage. When considering frequencies for use in conjunction with a proposed repeater, be certain that both the input and output fall within sub bands authorized for repeater use, and do not extend past the sub band edges. FCC regulation 97.205(b) defines frequencies which are currently available for repeater use. Please consult your local ARCA Frequency Coordinator for help finding suitable repeater frequencies.

For example, a 2-meter repeater on 145.50MHz would be out-of-band because the deviation will put the signal outside of the authorized band segment.

Packet radio operations under automatic control should be guided by Section 97.109(d) of the FCC rules. Prior to regular packet radio use of any VHF/UHF "channel" is is advisable to check with the local ARCA frequency coordinator.

144.000	- 144.050	EME (CW)
144.050	- 144.100	General CW & weak signals
144.100	- 144.200	EME & weak signal SSB
144.200	-	SSB calling frequency
144.200	- 144.275	General SSB operations
144.275	- 144.300	Propagation beacons
144.300	- 144.500	OSCAR subband (no current satellite use)
144.390	-	APRS
144.450	-	AM calling / net frequency
144.510	- 144.540	Digital voice repeater inputs
144.540	- 144.560	Packet & digital voice repeater inputs
144.560	- 144.900	Voice repeater inputs
144.570	- 144.630	Voice Repeater Inputs (Backyard & Portable *)
144.900	- 145.100	Packet simplex & weak signal
145.100	- 145.140	Digital voice repeater outputs
145.140	- 145.160	Packet & digital voice repeater outputs
145.170	- 145.230	Voice Repeater outputs (Backyard and Portable*)
145.250	- 145.500	Voice repeater outputs
145.500	- 145.800	Packet simplex & experimental modes
145.800	- 146.000	OSCAR subband
146.010	- 146.400	Repeater inputs
146.400	- 146.600	Simplex operation (Even 20 kHz Frequencies strongly recommended **)
146.520	-	National Simplex Calling Frequency
146.600	- 147.400	Repeater outputs
147.400	- 147.590	Simplex operation (Even 20kHz Frequencies strongly recommended **)
147.590	- 147.990	Repeater inputs

* Arizona Repeater Owners Policy on Low Level Repeaters Updated to Include Portable Operation

The coordinators have received a number of requests from clubs for "portable" coordinations to support public service and disaster communications. By definition, a coordination is to a fixed location, so coordination of a portable repeater is not possible

ADDENDUM 11/01/2016: The low level / backyard pairs are for **Analog operation only** due to the fact that analog and digital modes do not play well on shared frequencies.

The pairs 145.17/144.57, 145.19/144.59, 145.21/144.61 and 145.23/144.63 were designated as "Low-Site" (Backyard Repeater) pairs by the repeater owners in Arizona in 1985. Portable operation was added in 2002. These pairs are intended for shared, local and portable operations. Some overlap is expected, and digital mode operation is not allowed. Operators agree to accept co-channel occupation and act to prevent inadvertent access by co-channel users. Use of PL access tone is mandatory, and users are responsible for "PL" tone frequency coordination, but need to advise the coordinator of their choice. They agree not to operate in "beacon" mode, or interfere to other amateur frequencies or commercial systems (autopatch or the internet; IRLP or Echolink) that might monopolize the "channel". Transmitter power is limited to a max of 25W; and 50W ERP, with an antenna not to exceed 50 ft AGL. Temporary (3- day or less), uncoordinated portable repeater operation on 2M is limited to these four channels, and power is limited to 10 watts with a 3 dB antenna no more than 25' high. The operator of such a portable repeater must accept any interference to their operation that may result from their own choice of channel and PL tone.

** Use of Simplex Frequencies

The most popular frequencies in the simplex subbands fall on even 20kHz frequencies. This minimizes interference from adjacent operations. **It is good operating practice and strongly recommended to utilize these defacto "channels"**, but operation anywhere in the simplex subband is legal, as long as you do not cause interference to an ongoing conversation on a nearby frequency. These frequencies, like most Amateur frequencies are to be utilized on a non-interfering basis to on-going conversations. Amateur frequencies are always "first come, first served" with the exception of Coordinated Repeaters in the Repeater Subbands. Also, remember that no one "owns" a frequency. When you complete the NCVEC Form 605 (or any FCC Amateur Form, you agree to the following statement: "I waive any claim to the use of any particular frequency regardless of prior use by license or otherwise;" This is detailed in 97.101.

Coordination Requests Near AZ-CA Border

Requests for repeater coordination at locations where RF will spill into neighboring states may take a little longer because we have to get approval from that state or states. In the event of operations that will impact California, the frequencies must satisfy both Arizona and California bandplans. The following is a list of frequencies that meet both criteria.

OUTPUT	-	INPUT		OUTPUT	-	INPUT
146.64	-	146.04		147.06	-	147.66
146.70	-	146.10		147.12	-	147.72
146.76	-	146.16		147.18	-	147.78
146.82	-	146.22		147.24	-	147.84
146.94	-	146.34		147.30	-	147.90
147.00	-	147.60		147.36	-	147.96

Please contact your local ARCA Frequency Coordinator for additional information on frequency spacing and use. See Coordinator listing on this site.