

A/B Suffix VHF Frequencies

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You have probably heard the Coast Guard tell a boater on Channel 16 to switch and answer on Channel 22 Alpha. This is what that means.

Marine VHF mostly uses "simplex" transmission, where communication can only take place in one direction at a time. A transmit button on the set or microphone determines whether it is operating as a transmitter or a receiver. Some channels, however, are "duplex" transmission channels where communication can take place in both directions simultaneously when the equipment on both ends allows for it. For instance, VHF Channel 22, the Coast Guard working channel, internationally, is duplex where the send is on 157.100 mhz and the receive is on 161.700 mhz.

In the United States, we use many of the duplex channels in the simplex mode. Channel 22 uses the lower frequency for both sending and receiving. When duplex channels are used in the simplex mode an "A" suffix is added to the channel designation. Thus, the Coast Guard working Channel is 22A or 22 Alpha.

In some areas, the upper frequency of a duplex channel is used and is designated by a "B" suffix.

Some VHF transceivers are equipped with an "International - U.S." switch for use outside the United States. "A/B" channels are generally only used in the United States, and use is normally not recognized or allowed outside the U.S.

The International Telecommunications Union, at a 2012 conference, established a new numbering scheme that is very slow to take effect. This will affect 18 channels. Basically the "A" suffix for duplex channels operating in the simplex mode will be replaced by a "10" prefix. Thus, Channel 22A will become Channel 1022. For channels using the upper duplex frequency the B suffix will be replaced by a "20" prefix.

Only the nomenclature changes, not the physical operation. Eventually, radio manufacturers will adopt the new convention.