

Microvolt

Monthly newsletter of the Utah Amateur Radio Club

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The Joy of DX



Many hams today enjoy *DXing*, the pastime of communicating with hams in other countries. Numerous amateurs have entered the craft on the premise of being able to communicate globally without reliance on either cellular or internet infrastructure.

Whether you're working **portable**, casually calling CQ, or contacting during a contest, let's explore what it's going to take for *you* to make an international contact, starting with a good antenna and a little courage.

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**Online version only*



Cover – Working DX

The term “**DX**” is an abbreviation for **distance**. Technically, a **DX contact** is one made with an amateur operator outside one’s country of transmission. The US uniquely defines DX as any country outside the CONUS (continental United States) except Canada and Mexico, yet considers Hawaii and Alaska as DX locations because of their distances from the mainland. When an amateur is seeking DX contacts, we say that he or she is **chasing DX** and that “**DXing**” is a colloquialism of that term. A **DXer**, therefore, is slang for an operator who pursues DXing.

The strongest signals being radiated from your antenna are collectively transmitted in an average direction whose angle relative to level ground is known as its **takeoff angle**. Making a DX contact often requires an antenna with a relatively low takeoff angle, the lower the angle, the farther away the signal will strike the ionosphere before returning to the Earth.

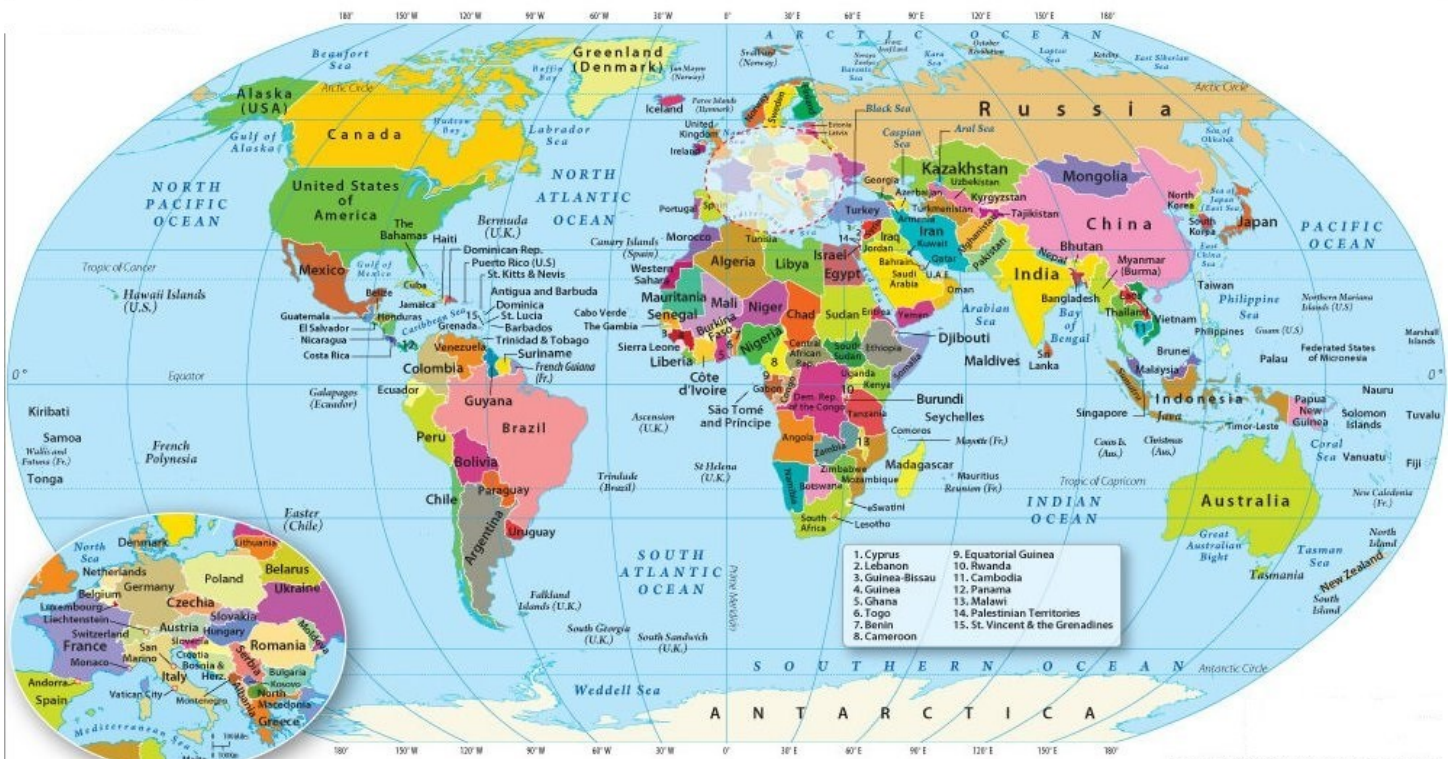
You can make a DX contact by an antenna with a higher takeoff angle, but more than one up-and-down trip (“**hop**”) might be required to reach its destination, and the more hops, the more the signal is attenuated (reduced in strength) with each hop. A **vertical antenna** tends to have a very low takeoff angle, especially if it uses radials. A **Yagi beam** can also exhibit a low takeoff angle if it’s mounted up high with respect to its supported frequencies.



If you’re attempting to make a DX contact, you can call out “**CQ DX**” instead of simply “**CQ**”. But when you do, expect a **pileup**, or several operators who are answering simultaneously. And when you encounter an international operator who’s calling CQ, you might discover that he or she is working **split operation**, or receiving by one frequency while transmitting on another. And if that operator is transmitting from a remote island, he might be part of a **DXpedition**. Finally, once you’ve made that DX contact, don’t forget to **log** it, especially on **QRZ**, so others can see it.

You can find more **thoughts about DXing** by the ARRL on arrl.org/chasing-dx

Microvolt editorial staff



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