

“Looking for a New DX Challenge?”

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The wonderful thing about our great hobby of Amateur Radio is the fact that there are so many diverse aspects to pursue. For those of us focused on DXing, the same adage still rings true. One can go after bands, zones, modes, QRP or all of the above. One thing most DXers have in common is we all seem to love a challenge, including perhaps even new twists applied to the game of DXing. The purpose of this article is to present such a new twist, for those who may be looking for new challenges and thrills within our hobby. For me, the thrill of DXing is the same one I feel while sitting in a deer blind, waiting for the “big one” to appear!

Through total happenstance, I recently found myself the proud owner of a brand new ICOM 7000, with no clear purpose in mind for the radio. A decade ago, I had operated a very basic mobile station with limited results. The IC 7000 is anything but basic, it is a feature loaded HF/VHF/UHF transceiver housed in a small mobile ready package. With this in mind, I considered the possibility of trying mobile again, but this time with one of the popular brands of highly adaptable “screwdriver” antennas. As I considered it, my main concerns were that I did not want to deal with the unsafe distraction of having to “tune” an antenna while driving; coupled with concerns as to how such a system could even be installed in my Tacoma truck. After some limited thought, I dismissed the idea almost altogether.

Then one day on 17M I had a nice QSO with fellow ham Steve Fishman, KC2RFQ, who soon changed my mind. He described one of the automatic screwdriver controllers that interface with both the radio and the antenna motor. This device is not a conventional antenna tuner that electrically tunes the antenna, rather a controller that turns the screwdriver motor while automatically reading SWR via the radio’s data port, which makes tuning a “push button” cinch; safe for the driver. This single accessory resolved my first concern. Through his knowledge and experience, Steve provided the much needed push and encouragement for me to pursue mobile operations and we have continued to compare notes on the subject.

Next I located a bright young man at a local auto electronics place, who for a very reasonable fee, was able to neatly and professionally wire power, RF, audio and the control head, with the radio itself mounted discretely under the front seat. The under-seat vent was covered with duct tape, so as to prevent hot air in the winter from blowing on the radio. In the summer, the tape can simply be removed and your rig will be cooled by cabin AC. A local welding shop then trimmed and attached an inexpensive but very stout 2” “hitch receiver extension”, purchased from a local farm supply store, to the side of my existing receiver hitch frame for a sturdy rear side hitch mount. All issues were now resolved and the mobile system was ready for service.

Regardless of what mobile antenna you may elect to use, I strongly recommend some sort of automatic antenna tuner so that you are not required to be “head down” looking at an SWR meter while driving. Should you go with a screwdriver, the type described above is

a must, in my opinion. A nice aspect of the screwdriver antennas is that most use standard 3/8" x 24 threads. This allows standard quick disconnects to be used, so you can easily experiment with different whip lengths and capacity hats. In my case, a 6' whip with a capacity hat for a total height of about 14.5' is the preference, although for quick trips the system works with the capacity hat only, atop the large base coil. For fixed operation, there are even 10' to 12' "military style" collapsible whips that can be stored in the trunk yet rapidly deployed. Just think, with one of those, you now have a ready made Field Day station, complete with a comfortable chair, AC and built in emergency power!

Another accessory that I would highly recommend is one of the audio DSP speakers, designed to filter out engine noise or repetitive static. Most such speakers have a phone jack, so it is feasible to use a headset on one or both ears, as controlled by local laws, which you should check on. With a VOX headset, you can not only monitor transmitted audio with most rigs, but you can keep both hands on the wheel and both eyes on the road without getting tangled up in the proverbial microphone cord. Speaking of microphones, should you be so inclined, they can even be eliminated altogether by mounting a CW paddle on either the center console, in a cup holder or with a leg strap. Such a mobile CW setup keeps your sending hand within easy reach of the wheel, giving you yet another mobile option.

Finally a good RF ground is necessary, not just a DC ground. This is essential to minimize SWR, engine noise and RFI, and is easily accomplished with large grounding straps, screwed in with self tapping metal screws and bumper washers. Serrated washers were also added to bite into the metal for a better connection. Strap should be used, not wire, for better RF grounding. Ground straps were installed between the receiver hitch and frame, and between the frame and truck bed. It is noteworthy that this system has had no issues with RFI or ignition noise. A flat SWR is achievable on all bands, 80 through 10 meters. With the screwdriver antenna system, bandwidth is obviously not an issue.

Once this system was in place, the fun began. Very quickly I discovered that DX was easily within reach. Although there is no such thing as a "mobile DXCC", I began tracking DX QSOs and seeking confirmations, simply as a personal challenge. In that process, I discovered that a new LOTW certificate for the "/M" designator could be used to sign the mobile QSOs. With this in hand, I am now able to effectively use LOTW for mobile confirmations. After about six weeks of casual mobile operation, I now have 66 countries worked, with half confirmed. While a very long way from DXCC Honor Roll, it has been great fun so far.

Some of my friends, such as LSDXA member Alan Brown, K5AB, are quite accomplished mobile DXers. Alan's mobile total stands at 249 DX entities confirmed, worked while he is waiting on Navassa Island, needed to reach Top of the Honor Roll from his home station. Recently I mentioned the idea of a mobile DX award to ARRL's DXCC Manager, Bill Moore, NC1L. Bill was interested, and said they would consider an award similar to the QRP awards, where the applicant would sign a statement self certifying that the contacts were made via mobile. While such an award would not be a true DXCC award, it could still be a lot of fun. Just imagine, a mobile DX "CW

endorsement"! LSDXA does have some history with such an award. At Ham Com 2003, Herb Blair, K5AT, presented Alan Brown, K5AB, a special LSDXA Mobile DX Award for attaining 100 countries, confirmed via mobile operation. The Central Texas DX & Contest Club even includes mobile numbers in DX standings for their members. I really hope ARRL will give the idea of a mobile DX award some serious consideration.

On a final note, you do not have to be mobile "in motion", nor do you have to be the driver to have plenty of fun. Please be safe and avoid any situations that push your comfort zone. There are plenty of nice roadside parks that offer great spots for DXing. Near my home, there is a great and little used park perched upon a bluff overlooking the lake, which provides good elevation. That is another neat thing about mobile, you can often work with topography. Besides, with mobile, there are no CC&Rs or next door neighbors to complain. Just remember, safety first!

Hopefully, this article will encourage some that are either looking for a new challenge or live under restrictive covenants, but still want to chase a new one!

73 & Good DXing,

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