Rick Lewis

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Hi Jock,

I can't point you to a book or article, but I can offer a few tips.

First, you're not going to get what the big guys with their big antennas can get, but you can have fun.

Two considerations are using the most sensitive and selective radio you can find, (I'd recommend the Qodosen DX-286; others may have recommendations.)

A good radio makes lots of difference.

Then, learn your dial and your area's conditions. No point in spending a lot of time trying to identify a station if it's a regular catch 50 miles away.

I don't know where you're located, but many areas east of the Rockies get amazing "trop" conditions, especially when high pressure settles over a large area in the summer and fall.

I live in an area devoid of trop, so although I've experienced it, it's not part of my hobby. But it can be exciting to be visited by stations at local strength that you normally don't receive.

And then there's sporadic-E, which peaks in June and July, often with distances of 800-1400 miles. This can happen in non-summer months, but not often.

Early morning to midday is peak time, and 5 PM till after sunset (or later.)

These band openings decrease in August.

But knowing your normal conditions is the first step.

I live in a very DX-poor area, where conditions vary greatly from season to season. And really, e-skip (sporadic-E) is the only DX I have.

I received 20 stations in 2019, and 146 stations in 2023.

In most years, I'm fortunate if I have 8 stations a year from Arizona; in 2023, I got 33, most of them in one evening.

It'll help if you're using a radio that displays RDS. Otherwise, you may have to listen for long periods to find out what you're getting. Gone are the days when stations mentioned their call letters every 3 minutes.

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Rick

Hi Jock,

I do almost exclusively mobile DXing with a portable radio and study coastal propagation, which, if you take away the coastal part of it that will very much not help you in your part of upstate NY, there is a lot of propagation-related knowledge I have acquired that could be helpful. And a lot of resources in the meantime that I've saved for whenever I add more to my DX website about the topic. I'll try to share some of them with you, with the understanding that you're just new to FM and that you're certainly not a DXing newbie.

So, first off, I really like this fellow DXer's website with this page about propagation. I saved it just last week as a way to better present the topic on my own website and he does a great job visually presenting different modes of tropo and explaining how they work: https://3fs.net.au/tropospheric-propagation/

Once you understand how FM propagation works, you can leave it up to Bill Hepburn's forecasts, which are usually very accurate. He is a retired meteorologist and a wealth of info about propagation and has tweaked his models over the years (not recently though), even well enough to pick up the low-level marine tropo that I use for DXing. But sometimes a big opening will appear on the maps and you'll wait for it and find there is nothing there, usually because it has detected a temperature inversion that is at a different elevation, i.e. above you or below you, so you miss out on it, often because it's too elevated. You can find those maps here, updated early every afternoon: https://dxinfocentre.com/tropo.html (and don't forget to check out other resources on his site too).

Similar to Bill's forecast site, the APRS site shows real-time propagation of Ham radio users, so you can see what's ACTUALLY being reported at the time. Again, you may be under a red blob with lots of paths showing and have a dead band, usually meaning you are too high/low to get in on the action: https://vhf.dxview.org/

This is a little bit of a niche part of tropo, but tropo scatter (TrS) is pretty common in your area. I'm not a total stranger to DXing up by Plattsburgh, Burlington, and in the Adirondacks (even more toward Lake George). And even though I think you're quite a bit south of there, you're still close enough. But if it's interested, Bob Atkins has a good little primer on TrS, leaning more on the scientific side of it: https://www.bobatkins.com/radio/troposcatter.html

Some other necessary notes about DXing FM:

Like with DXing AM in the overnight hours, FM is the same. Nighttime enhancement occurs with FM when the vegetation gives off moisture in the lower level of the atmosphere, especially in areas with a lot of crops, like in the corn belt, but you'll get it almost anywhere. Signals become enhanced and you're more likely to hear tropo after the sun goes down, and it may not be "tropo" so much, but will be extended signals, perhaps up to 150 miles or so generally,

depending on surrounding terrain. If you're up closer to Plattsburgh, at least before a lot of those stupid translators clogged the dial, you could hear Trois-Rivieres stations in 24/7 but especially strong at night. And Ottawa much the same. Though you're not up that way, no doubt with some enhancement, those signals can creep further south. Those signals will get stronger after sunset and will stick around after sunrise perhaps for a few hours as they gradually fade out. Then the daytime is quieter, much like AM, unless overall tropo conditions are present.

With FM in the mountains or near the mountains, you can get things like knife-edge refraction, when a signal will bounce off the side of mountain and come back to your location. You could be driving along and find an area where a station comes in really strong and it may be in that spot all the time. If you can find those spots if you are mobile, you can enhance your listening a bit. Given your location, it seems relevant to mention it. Mine, on the other hand, not so much, as it's rather flat here.

E-skip has been mentioned elsewhere, so I won't go into that at all, aside from it being from May to early August and then another peak toward Christmas.

You don't need any big antennas or SDRs or cool equipment for great DXing on FM. Some people live by that stuff, and that's fine, but I personally get 600 or 700+ miles on my portable; they're literally the only radios I own and use. Just stand in the right spots and listen in and you'll find stuff. I have a few AM radio projects I have released over the years (Asian MW, Korean, Chinese, propaganda stations, etc.) and honestly, they were all done entirely with my portable radio and zero external antennas, just the dipole. FM can yield awesome results the same way. And you don't need any special equipment when you're just starting out on FM anyway. And you also have another DXer in your general area too, Brett Washburn in Glens Falls. If you ran into him online anywhere, no doubt he could give you a few ideas of what to listen for.

I would personally go through the band over the course of a few weeks, day and night, and make a list of all your locals and semi-locals and become familiar with them all and then you'll know what is special or not and it'll make DXing on FM a lot easier. And as for ultralights, Gary does a fine job with those radios on the AM side.

Best of luck!

-Chris Kadlec