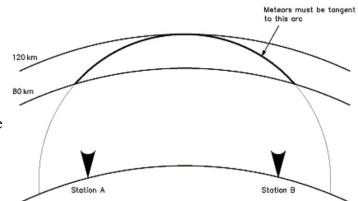
## Alachua County Meteor Scatter POTA Event - December 14 Gordon Gibby KX4Z

The North Florida Amateur Radio Club (support structure for Alachua County ARES(R) ) is blessed to have a true VHF/UHF expert in our midst, Mike Hasselbeck WB2FKO. He is involved in all kinds of VHF/UHF contests, techniques and events. We had him talk about "propagation" in these frequency realms at a meeting a few months back, and he brought out meteor scatter, something most of us have never tried -- and he's an expert at it!



It turns out that for beginners like us, 6 meters is the ticket for longer lasting meteor propagation, and as the ICOM 7300 and other radios have brought 100-watt 6-meter comms within the reach of more and more of us, this looked like something we could actually do as a club event! The figure above shows how the ionized trail left by a small meteor provides a reflecting surface for bouncing signals from one station to another (from https://www.arrl.org/files/file/QST Binaries/nt0z.pdf)



Thanks to Stewart Reissener, KK4DXF, we have a trailermounted tower good to 30 feet or more, and Mike has a small 6 meter beam suitable for POTA events -- and POTA is a big deal to several of our ARES(R) volunteers. Perusing the available meteor scatter times, we settled on the Geminids meteor scatter, where Saturday December 14th would likely provide acceptable weather, fewer bugs, and great fun for the adventurous ones in our group!

David Huckstep W4JIR recently successfully negotiated with Alachua County Fire Rescue for a portable HF station to complement our in-place EOC gear, and he almost has the

entire thing nestled into a couple "Gator" go-boxes. We're going to use this gear in our first-ever Meteor Scatter / POTA event. At the same time, we'll throw up an EFHW antenna (among others) and have standard HF POTA work going on simultaneously on multiple bands using our Sextuple Antenna Multiplexer, which worked exceedingly well during summer Field Day. (See: <a href="https://www.nf4rc.club/how-to-docs/antennas/adding-6th-band-alachua-county-sextuple-multiplexer/">https://www.nf4rc.club/how-to-docs/antennas/adding-6th-band-alachua-county-sextuple-multiplexer/</a> and <a href="https://www.nf4rc/2023/Quintplexor2023.pdf">https://www.nf4rc/2023/Quintplexor2023.pdf</a> )

## Dec 14 Meteor Scatter Incident Action Plan https://www.nf4rc.club/meteor-scatter-pota-event/

If you would like to join us, the Incident Action Plan can be reviewed here: <u>https://www.nf4rc.club/meteor-scatter-pota-event/</u> San Felasco State Park is huge, and has many different venues and possibilities. We'll be using an obscure entrance to the part just south of the city of Alachua, hidden on the south side of Progress Blvd, which is a big new road past several industrial startups. There is a nice pavilion available there, with many picnic tables, commercial electricity outlets and restrooms -- perfect for a POTA event. Send me a note at docvacuumtubes at gmail to let me know you're coming and happy to have you! The State Park does require a nominal admission fee per vehicle on the honor system.

There are several articles available to help bring you up to speed on this fascinating communications technique:

- https://swling.com/blog/2024/01/meteor-scatter-with-wsjt-x/
- <u>https://g7rdx.co.uk/vhf/meteor-scatter/</u>
- <u>https://www.arrl.org/files/file/QEX\_Next\_Issue/SeptOct2017/FrankeTaylor.pdf</u>

Expected equipment transported for the POTA event:

- 30+ foot trailered aluma tower
- 3-element 6 meter beam on rotator
- Multiband EFHW antenna supported by tower (Park rules limit impact on vegetation)
- Volunteer-brought vertical antennas
- ICOM7300 / MFJ 600 watt amplifier for 6 meter meteor scatter
- Multiple other volunteer stations on different bands (CW/Voice/Digital)

We will be using club callsign NF4RC as well as individual callsigns. I expect multiple POTA spots. If you can't join us for the event, perhaps you can work us on meteor scatter on 6 meters, or our HF POTA stations on any of our HF frequencies!