

Picnic For The Aether

Thomas Icom - "Ticom" · July 14, 2026

It's been a few years. I usually miss it at the 11th hour. There's this small(ish) group of ham radio operators, ranging from Maine to New Jersey. Their piece of the hobby is a niche. They concentrate in the wavelengths below 6 Meters, and especially below 33 Centimeters. That's above 1 Gigahertz in radio frequency. You can't walk into Ham Radio Outlet and buy stuff for these bands. It all has to be DIY.

Saturday we all met at a pavilion run by a civic organization. Been meeting there every July for at least the past twenty years. Connecticut gets chosen because it's in the middle of our territory. The pavilion gets the privilege of our annual picnic probably in part because the organizer lives about 30 minutes up the road. The first part is pretty normal. We meet, socialize, have lunch, and engage in a little horse-trading. Most everyone brings a box of stuff of stuff to sell, swap, or give away, and I've come home with some bargains and outright freebies over the years. This year was no exception, but I'll get to that later. Then we have a nominal club meeting to take care of business matters. You know, officer reports and all that. That goes by pretty quickly. Then things start getting interesting.

Next to the pavilion is a field about 350 feet across. One of the members, a retired engineer, sets up a small canopy with some test equipment at the far end so members can test their gear that they've set up. It's not traditional ham radio appliances. We're talking about stuff in operating at X-band and above. It's typically 10 Gigahertz, but sometimes even higher; the SHF and EHF bands. There are a handful of hams who operate as high as the **1-millimeter band**. I consider myself privileged to have seen their rigs IRL. It's all bespoke DIY made from surplus microwave RF parts and old satellite TV or point-to-point link dishes. Not a single rig is alike.

Once everyone is set up they test their equipment to make sure it's working OK. Over the course of the next 12 months these amateurs with more real-world RF experience than most engineers take to mountain-top locations so they can participate in contests on radio frequencies far above what a police scanner or the average ham rig can hear, on microwave

beams so tight that if your alignment is off by more than a degree or two you won't hear anything. My personal record is a little over 200 miles. Block Island to Mount Washington. On X-Band with less RF power than what a CB puts out. The current distance record is 899 miles.

Right now, there are hundreds of propagation beacons on these bands, sending out Morse Code IDs 24/7 to anyone who has the right equipment to hear them. When things up there start getting interesting, you can hear the beacons farther out than usual. Meanwhile, the average ham stays in their safe spectrum below 1 Gigahertz. That's probably for the best.