

With ham radio sometimes you struggle. You struggle with gear, with propagation, with time, with anything and everything. This was NOT one of those times. Preparation, planning, and advance testing all paid off.

For this time around with the [ARRL June VHF Contest](#) the [Alaska VHF-Up Group](#) was trying a number of new things. First off, a few of us were running the new Icom IC-9700 radios. These are VHF-UHF rigs that run on 2 meters, 70 centimeters, and 23 centimeters. You have to really enjoy VHF-UHF to get one of these radios, but for the enthusiast operator they are an excellent choice and offer SSB capability on an excellent selection of bands

The other new element was [Parks on the Air](#) (POTA). The club had been experimenting with POTA throughout the winter and spring, and we decided to incorporate it into the VHF contest. With the club rover out and about again we decided to make the first location a POTA activation: Chugach State Park (K-1637).

My usual operating location for the Glen Alps area is just outside the state park parking lot, since it provides an unobstructed view of South-Central Alaska. However, for the first site to qualify for POTA the rover would have to be within the park boundary, and the best location was in the Glen Alps Parking lot, above Anchorage.

I was concerned that some foliage would present problems – blocking signals and making it more difficult to get out. As luck would have it though, the foliage was not a problem at all. It goes to show, you never know if something will work unless you try.

The first grid was a no-brainer. The first hour or two of the contest is always the busiest, and so contacts rolled in, bands were QSY'ed, and fun was had. Chugach State Park and the first grid were in the bag.

This was quite a victory for me, since the rover station was a complete overhaul from prior contests. To begin with, I had a new truck: a 2021 Chevrolet Silverado Custom. A new truck sounds great, and it is, but having to rewire, reconfigure, and retest everything before a contest kind of sucks ass.



Rover station set up in the parking lot at Glen Alps, above Anchorage



Rover setup in the back of the truck. Power supplies in far corner, logging computer at left, 6 meter rig in center, and VHF/UHF rig at right.

As luck (and a metric crap-ton of hard work) would have it, I was able to get the truck set up in time for the contest. A power line was run under the truck and into the bed, a camper shell arrived just in time for the event, and the rotator-antenna stack was adapted to the new shell dimensions the week before the contest.

The hard part was testing the new radio configuration: two radios instead of one. Instead of using my Yaesu 817 for everything I had decided to run two radios: a Yaesu FT-891 would handle 6 meters, while the Icom IC-9700 would take care of 2 M, 70 cm, and 23 cm.

The Yaesu 891 was an old friend at this point – I had used it on numerous POTA activations with great success. The display is readable, power draw is acceptable, the case is compact, and it simply works. I've worked hams from Anchorage to Florida with this radio.



The Yaesu 891 is a great portable radio for POTA or rover contests. With 100 watts on 6 M this was my go to rig for 50 MHz.

The IC-9700 was another story It had arrived in the mail only a few weeks earlier, and before the contest my total time on the air with this rig amounted to something between zilch and zero.

However, I am a firm believer in never letting reality get in the way of a good plan. So . . . I soldered up a power cable, semi-tested the headset adapter, printed off the advanced manual, and decided to learn by doing. (It was either that or stay home, right?)

And that's where I fell in love. By analogy, if the Yaesu 891 is a calm, steady loving girl-next-door, then the IC-9700 is a surgically-augmented, no holds barred, \$1,000-per -our escort VHF-UHF power. And it has a touchscreen.

If you can't guess already, the IC-9700 worked great, did everything I asked, and became my new favorite.



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With the first grid and the POTA activation securely in the bag, it was time to move on to grid two: Point Woronzof. This grid is one about which I always have mixed feelings. The site is right at the end of Ted Stevens International Airport, and had great views in all directions.

However, it has a ridiculous amount of audio QRM in the form of jets taking off. For digital operating the background noise wouldn't be an issue, but operating voice from this location can really be a pain. Just when someone starts calling or response to your CQ a jet will take off under full power and prevent you from replying.

The site works, but it also *takes work* to make it work.

Another thing that this site will put to the test is your rotator operating skills. If the grid was at the center of a clock face, Anchorage would be at 3 o'clock, the Mat-Su Valley at 1:30 o'clock, and the Kenai Peninsula at about 7 o'clock. What that means is that your rotator gets a workout trying to bring in all the weak stations, and your power system needs to be able to keep up.



The back of a truck makes for a surprisingly comfortable operating location.

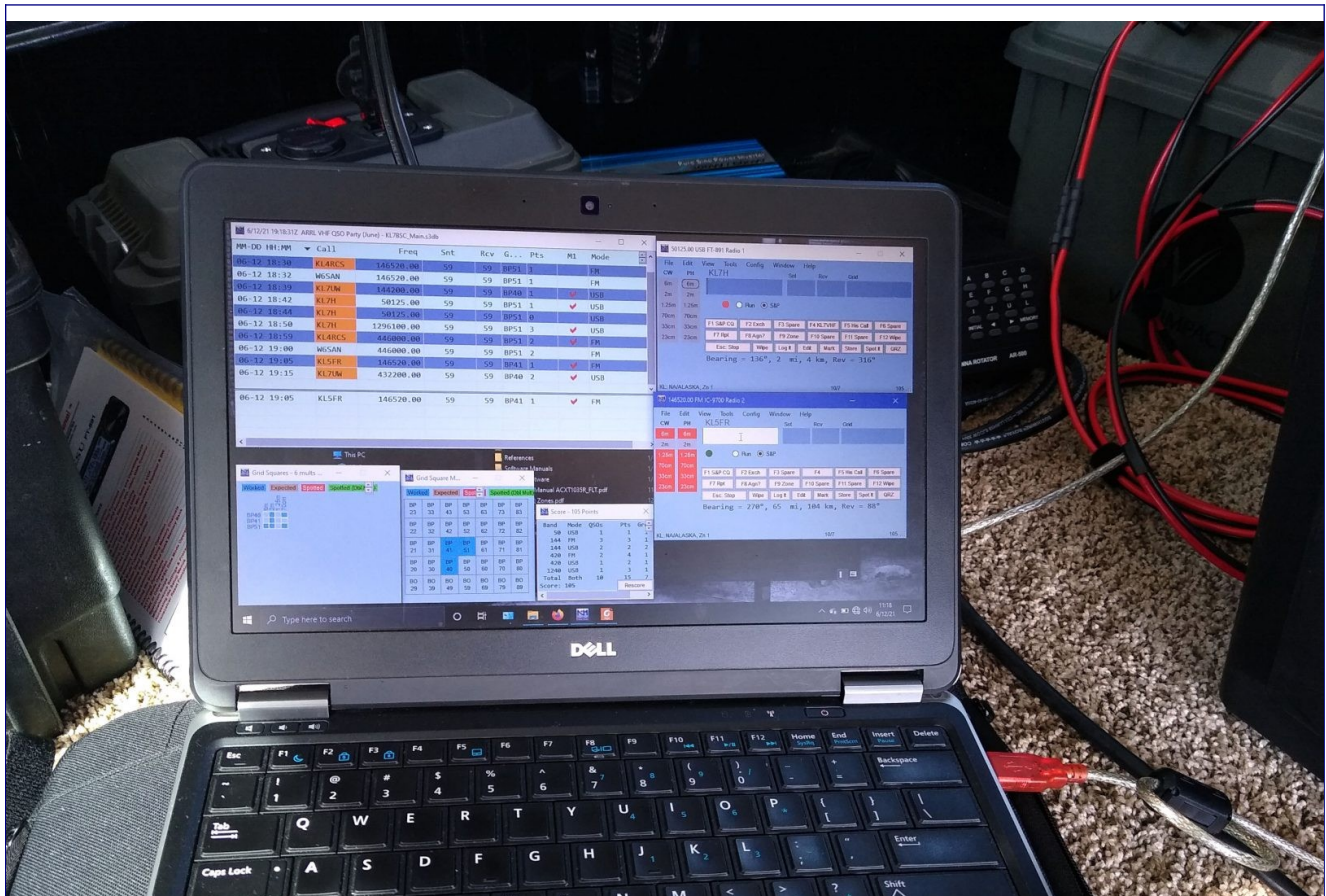
For the event I brought along a few different power sources: vehicle power, a small battery box, and a large battery box. [The two battery boxes](#) are perfect for portable operating. They produce no RFI, are compact, and can be recharged from the vehicle alternator while traveling between grids.



The green ammo cans hold battery packs which recharge from the vehicle while in motion. The blue box is an inverter which powers the black box – a rotator control.

Another aspect of this event that was new to me was operating single-operator two-radio, or SO2R. If you're not familiar with this technique, the concept is simple.

- If one radio is good, two is better.
- Monitoring one band is good; monitoring two is better



This was my first time using two radios in a contest: single-operator two-radio (SO2R). N1MM made it surprisingly easy.

SO2R is a technique normally used in fast-paced contests for quickly responding to new stations coming on-air, catching new multipliers, or eliminating time lost switching between bands throughout the event. The VHF contests in Alaska are anything but fast-paced (population too small), so those advantages are not needed up here. I was operating that way for a few reasons.

Firstly, the IC-9700 doesn't run 6 meters. This is a deliberate omission by Icom since the intent is for this radio to be paired with existing "HF+6" gear. However, for a contest this does commit you to running two rigs.

Secondly, openings to Alaska on 6 meters are becoming a regular thing in the summers. There are a few hams up here who are routinely working Japan and the west coast of the contiguous US during the summer, and I want to do that too, eventually.

That requires some watts, as well as a separate radio connected to its own Yagi and piping audio to WSJT-X. For a few future contests I wanted to try that, so this was a good time to get used to running a second radio.



Operating at the last grid of the day: Turnagain Arm

Anyway, Point Woronzof yielded up a number of good contacts, especially from the Mat-Su Valley. With that grid taken care of it was time to head to the third and final one of the day: Turnagain Arm.

Back when I first started planning rover routes up here this was a location which a number of hams advised me was unreachable. Mountains are in the way, it has line of sight to nowhere, and there are no hams in the area. However knife-edge diffraction around the mountains on either side of Turnagain



transceiver, shade, and coax . . . what more could a ham need?

Arm actually opens up a number of populated areas for contacts. Nikiski and Kenai can be reached on the south side, and Anchorage stations come in loud and clear on the north side. The better-equipped Mat-Su stations can also be reached from here, although some gain in the antenna system is required on both sides of the the contact.



This is the infamous Turnagain Arm spot: a location which I was absolutely assured I would never be able to make contacts from. Think again!

The weather was beautiful, the antennas were working, the radios were humming, and a handful of contacts rolled in. This grid definitely requires work since you are using diffraction to make contacts, but it does work if you bring a little gain, a little power, and a full set of balls.

The previous locations don't actually *require* Yagis to put them on the air, for the most part. From Glen Alps and Point Woronzof you can work Anchorage and the Mat-Su Valley with just an omni antenna. (I know, I've done it.) Reaching down to the Kenai does require Yagis though, which is why I bring them.

The Turnagain Arm location is another matter entirely. That area is a bit remote, a bit out of sight, and a lot "around the corner" from everyone else. This kind of location is where you really find out if your antennas can carry their weight, and mine came through with flying colors.

The antenna stack this time around was a big change from prior contests. Firstly, I finally traded in my 6 M loaded vertical for a proper horizontal Yagi antenna. The 6 meter antenna is too wide to go down the road, so before driving between grids it actually had to be loosened, rotated 90 degrees to be in-line with the truck, and then re-tightened for travel. It sounds like a lot of work, but when standing on the tailgate it only takes a moment in practice.



View of the antenna stack set up and in operation. Note that the 2-element 6 meter antenna has to be rotated 90 degrees once I arrive on site. It is too wide to drive down the road with it in operating orientation.

The other big change this time around was the addition of the Comet 23 cm antenna. My previous radios didn't have this band, so a new antenna was required. Because of time constraints I elected to use a factory-built Comet antenna. It worked out well with an obscene number of elements giving me enough gain to make contacts even from this last location.