Tips and Tricks for the Simplex Challenge

Many folks have said that they would like to participate in the KLARA simplex challenge, but are not exactly sure how to go about it. Here are a few tips and tricks to get you started.

This years contest has two divisions, FM and SSB, as well as 2 sub-classes, 2 meters and 6 meters. You may play in any or all. Accordingly, we have split the tips and tricks into several different sections.

Transceivers

In the **FM** portion of the contest, I think most people will already have what is necessary. A 2 meter handheld or mobile / portable rig will work nicely. All of the "Big 3" manufacturers (Yaesu, Icom, and Kenwood) make gear which will be very suitable. In addition, many Chinese manufacturers (Baofeng / Paofeng, TYT, and many others) also make suitable equipment.

In the **SSB** portion of the contest, the transceivers may be somewhat harder to come by. Here again the "Big 3" all manufacture (or have manufactured) all band, all mode transceivers. There may be some examples among the Chinese manufacturers, but I am not familiar enough with this market to make comments.

Frequencies

In the **FM** portion of the contest any simplex frequencies are admissible. The nationwide calling frequency for 2 meter FM is 146.520. The nationwide calling frequency for 6 meter FM is 52.525. While it is permissible to initiate contacts on these frequencies you should QSY to another frequency to complete your exchange. 146.535 has, for many years, been known among the KLARA membership as "KLARA simplex". There will likely be a lot of traffic on this frequency. Remember that you should be able to set the channel step for your transceiver. 15 kHz steps are not that tough to accommodate. Find your manual!

In the **SSB** portion of the contest, I would tend to concentrate on the portion of the 2 meter band between 144.10 to 144.275. 144.220 is the nationwide calling frequency. You can initiate contacts on the calling frequency, but you will need to QSY either up or down the band to make an exchange. In the 6 meter band the national calling frequency is 50.125. Here again if you make contact on the calling frequency, be ready to QSY up or down to complete your QSO.

I would tend to concentrate on the portion of the6 meter band between 50.100 and 50.300.

Remember, that if you happen to hit an open band, 6 meter SSB (and 2 meter SSB) is capable of going a long way. Be ready to explain what you are doing!

Antennas

One of the great things about both the 2 meter and 6 meter bands is that antennas are very reasonable in size, and easily fabricated with basic hand tools. Remember that antenna polarization is critical!

In the **FM** portion of the contest, most contacts will be accomplished with antennas which are vertically polarized. We have had stations in the past which were pretty effective using a handheld radio with the stock "rubber duck" antenna. Better antennas, of course, return better results! Try setting a "rat tail" counterpoise (Google it) at the base of your "rubber duck" antenna, or try a taller antenna. For a mobile rig, the ¼ wave mag mount or a ¼ wave ground plane antenna works well. A J-Pole can also be very effective.

In the **SSB** portion of the contest, most contacts will be accomplished using antennas which are horizontally polarized. A Yagi is excellent for this. There are plans on the Web which you can build using 1" x 2" wooden booms and coat hanger wire. There are also plans for Moxon antennas, and a large number of other styles, all of which should work well. Horizontal dipoles can also be very effective.

Rover vs. Fixed

Tips on this topic are not specific to the portion of the band you are looking to work in.

The **fixed** stations have an advantage, in that set – up only needs to be done once. Many fixed stations may be operated from a home location, in which case, the only set up necessary is to throw the power switch.

The **rover** stations are in a different situation. They will perform set up and tear down perhaps six to eight times through the four hour contest. I can only give a few general tips for the rovers:

1. Know your equipment. Practice with it before the contest.

2. Plan your route ahead of time . . . and look for high ground! Elevation is your friend! Try to take the time to scope out road construction plans ahead of time.

3. Take enough battery. You can (and I have) work from your car's electrical system. You can (and I have) also work from a stand alone battery. Make sure you calculate your power needs ahead of time.

That's about it. Go out there and have fun with it!

Six MeterFun

While I would not encourage anyone to go out and buy new equipment for this effort, I think some will be surprised to find that they already own equipment which is very capable of six meter work, with the proper antenna. Most of the newer HF rigs also include six meters.

The Yaesu FT-891 and 991 can handle 6 meters very easily, as can the FT-897 and FT-857. Among the Icom line the IC-7100 and IC-7300 include six meters, as do some of the older models. Kenwood does not have a lot options among their product line, although there are a few. Similarly, we don't hear a lot about Alinco, either new or used on six meters. Some of the Chinese HF rigs will also handle 6 meters.

Th six meter sub is a great chance to see what you can do (and what your fellow club members can do). Give it a try!