

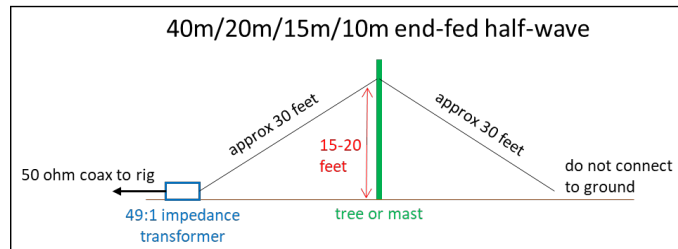
## Antennas for Go-Kit Use

The associated article “Creating a Go-Kit for Portable Use” (<https://nediv.arrl.org/limited-ham/>) discusses the assembly of portable operating stations that are housed in a case (a.k.a. Go-Kit). The usefulness of a Go-Kit depends on the type of portable operation in relation to several parameters.

The following table lists the types of operation, typical bands, typical power levels and case size. Antenna suggestions follow for each type of operation. As a side note, the tabular data suggests that a universal Go-Kit may be overkill and unwieldy for some types of operation.

type of operation	typical bands	typical power levels	Go-Kit case size
EmComm	80m, 40m, 20m, 2m, 70cm	100W	medium or large
public service	2m, 70cm	0.5W to 10W	small or medium
POTA	40m-10m (maybe 75/80m)	100W	medium
SOTA	40m, 20m (15m-6m around solar max and in the summer)	10W	small
Field Day	all bands	100W	large

EmComm – At least two antennas are needed – one for HF and one for VHF/UHF. An end-fed half-wave antenna in an inverted-vee configuration is simple and effective.



A vertical duo-band 2m/70cm antenna is effective for VHF/UHF when mounted on a pole. More elaborate antennas are possible, but in a true emergency scenario they may be unattainable.

Public service – Normally, most public service operations are with hand-held units. The base station for the operation could use a Go-Kit with a 10W rig and a duo-band vertical antenna.

POTA – A 40m/20m/15m/10m end-fed half-wave (or an 80m/40m/20m/15m/10m version if you want 75m/80m) will work well. You could use an inverted-vee on your favorite band with a collapsible mast. A sloping wire to a mast or a tree could also be used (tuner likely required).

SOTA – Assuming hiking to a summit will be involved, this type of operation requires a rig that is physically small and light weight. A formal Go-Kit may not be feasible. Antennas must be easily transported and easy to erect. Collapsible (or break-down) masts and wire antennas used with your rig’s internal antenna tuner are recommended. Even a simple 2-element 6m antenna (like a Moxon) could be manageable if your interest is VHF.

Field Day – A Go-Kit could be used for an HF station, for the GOTA station and for the 6m station. Size and weight aren't an issue. With respect to antennas, the sky is the limit. Dipoles, inverted-vees, end-fed half-waves, verticals and Yagis are feasible as are portable towers.