"Once upon a time" is a great way to start a fairy tale, but not an article on emergency communications, because once-upon-a-time was a really lousy place to be when it came to communication. In those fabled times, there was nothing except what you could transmit on foot or horseback or by boat. Maybe there were telegraph wires. Or a phone in the country store, depending on what flavor of once-upon-a-time you favor.

However, once-upon-a-time was pretty slow going in the best of circumstances. And now, even in the worst of circumstances, we can have globe traveling communication devices in our pockets.

When, not if, but when the grid goes down, cellphones stop working, the landline goes out, and the internet stops connecting, you'll find yourself in quite a pickle.

It may only be for a short time-perhaps somebody digging a ditch accidentally cut a main fiber optic trunk, or maybe you just got visited by the mother of all natural disasters-but there are good odds that someday you'll find yourself in a grid down situation, and you'll be scrambling for backup communications ability, and that will be entirely up to you, because in that setting, nobody is coming to hand you a radio.

There are lots of ways to reach out and touch someone, ranging from simple CB radios to fancy satellite phones and a bunch of methods in between. Check 'em out and see which one is best for you.

1. CB Radio

While the glory day of 70's CB culture is becoming a part of American mythology, there is still a lot to be said for CB or Citizen's Band radio.

Even though we are entering a period of low <u>solar</u> activity which reduces the practical range of CB, it is still a perfectly viable form of communication, offering a low barrier to entry, and the ability to communicate with many different people, and sometimes, depending on where you live, law enforcement.

The most common sort of CB is a <u>mobile unit</u> that is installed in a vehicle, and when paired with a <u>good antenna</u>, it is more than suitable for most CB work you might have.

A <u>handheld CB</u> is also quite handy as a backup, or to keep in your bugout bag. CB has plenty going for it: you don't need a license to operate, it is commonly used near major highways, and in rural areas. However, it's power and range is limited by law, and the largely free-for-all mindset that is common among CB users can make it hard to get serious use out of your radio.

Be sure to find out how active CB radio use is in your area before you invest heavily in this form of communication. However, it is affordable, common, and has a low technical barrier to entry, meaning you probably should have some sort of CB radio in your emergency communications stable.

2. FRS/GMRS

Close on the heels of CB are the sometimes confusing FRS (Family Radio Service) and GMRS (General Mobile Radio Service) radios. Both of these radio services use UHF frequencies which are limited to short line of sight distances of up to a mile or so in most cases.

FRS radios are free to use without a license, have a range up to a mile, cannot transmit at more than half a watt, must use fixed antennas, and come with other restrictions which are detailed when you purchase a new radio.

FRS radios do have the modest benefit of being able to use so-called "privacy codes" which use different programmed tones to allow multiple conversations on the same channel.

However, it is still possible to listen in on these transmissions, as it is only a way of breaking up a channel for multiple users. Honestly, the best use of an FRS radio is a short-range walkie-talkie. These radios lack the ability to really reach out, but they're great for short-range communications among a small group.

GMRS radios are also UHF frequency radios but require a license to operate This license costs \$70 for five years and is restricted to individuals. However, it comes with far more power and options. You can transmit up to 50 watts in power, use repeaters and removable antennas, and have a range of about 1.5 to 3 miles with a clear line of sight on a handheld, and up to about 30 miles with a good repeater setup.

This makes it far more useful for distance communications to a group in an isolated area. As a bonus, there are a handful of channels which overlap with FRS, allowing GMRS users to also use some FRS frequencies at FRS power output.

While GMRS is a licensed service, it is fairly easy to run an unlicensed station, although that choice is not advisable outside of a serious emergency. It is a great way to get some decent range on a UHF radio without studying for an amateur radio license, and it is very handy for running a base station and repeater that will cover a decent bit of terrain.

But like any UHF radio, it is very much line of sight dependent, and may not work well in uneven or heavily forested terrain.

Many radios have FRS and GMRS built into them, but make outlandish claims for potential range. These <u>Motorola radios</u> would be great FRS radios but only mediocre for GMRS. If you really want to experience the potential of GMRS, you'll want something like <u>this 40-watt mobile base station</u>, which gives the ability to get the most out of your GMRS service.

3. Sat Phones

Satellite phones can be the ultimate off-grid communication tool, or at least they can as long as the satellites are still up there. However, as long as nobody is <u>shooting</u> down satellites, these sat phones will work just fine. There are several different options. The cheapest way both in terms of service cost and price of equipment are devices that can transmit your location and send brief text messages.

The <u>Garmin Inreach Explorer</u> is a great example of just such a device. Not only does it come with all the great bells and whistles you'd expect from a Garmin GPS, it also can send text messages and serve as an emergency locator beacon. Pretty handy if you are in the middle of nowhere, or if the

world goes to heck.

Of course, not everything can be said in 160 characters. Sometimes you want or need voice communication. The Inmarsat IsatPhone 2 is one of the most powerful off-grid communications tools you can get your hands on. Capable of making voice calls anywhere in the world (other than polar regions), the IsatPhone is designed to work under extreme weather and temperature conditions, has up to an 80 hour talk time, and up to 160 hours of standby time. Cost is about \$750

These sat phones are industry standard for middle-of-nowhere communications. If you can afford it, and need absolute reliability right now in your commo, it's hard to turn down a good sat phone.

4. The goTenna

This is an odd little item. The <u>goTenna</u> attaches to your smart phone and allows you to create your own short range communications network. With a range of half a mile to a couple miles (or more) depending on terrain, this is a strictly close quarters communication solution, but for a small group, it could be ideal. It's not hard to think of what you could do with such short range solutions that allow you to call or text on your phone, even without a cell tower.

For the price, it's cheaper to just get a GMRS or FRS radio, and you'll get the same or better range. But the greater privacy and ability to text may make it worthwhile for some people.

5. Ham Radio

This is a complex subject which I already wrote about in <u>this article</u>. It's complex because it can include everything from <u>inexpensive handhelds</u> to modest <u>mobile units</u> to full-featured base stations.

There are three license classes which require <u>some studying</u> and a plethora of accessories which would require a book to fully explain. Suffice it to say, if you want to invest the time, money and training, you can do dang near everything with ham radio, including transmitting television signals, short range emergency communications, or talking to somebody on the other side of the world.

Ham radio may be the ultimate off-grid or emergency communications tool, but it also has one of the highest barriers to entry due to the knowledge and science-based licensing tests.

Some people do not like running a licensed radio service which detracts from the appeal, while others may struggle to find the time to study and <u>prepare</u> for the licensing exams. Financially too, ham radio can be problematic. It is all too easy to spend several thousand or more dollars on equipment if you want to get really involved in the hobby.

However, there are plenty of rational middle spots that allow you to have ready access to radio communication without spending a lot of money. A good 2-meter handheld or mobile radio, a decent antenna, and the knowledge to use them can go a long way in most parts of the US, and won't break your bank.

Conclusion

There are a lot of different ways to communicate in an emergency. The ones with the most range and power also require the greatest expenditure in time and/or money to operate, either due to legal restrictions, complexity of equipment, or both.

However, there are also plenty of low-cost communication alternatives, and in the case of ham radio, it is fairly easy to get licensed and run a basic radio, which will suffice in most emergency situations.

A clever prepper will have more than one choice in their emergency communications. There is little reason not to have a CB, and from there, you can choose any other communications method that will suit your needs.

Personally, I like the idea of a CB, <u>ham radio</u> and a sat phone, the combination ensuring that you can pretty much always reach somebody.

Regardless of what choice you make, the first rule of emergency communications is like the first rule of a gunfight. Have a radio (or sat phone). Once you've got that, then you can worry about the rest. Study the situations you are likely to find yourself in, and equip yourself accordingly.

<u>5 Ways to Contact Loved Ones After the Grid Goes Down - https://urbansurvivalsite.com/ways-contact-loved-ones-grid-goes/</u>

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