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COMMUNICATIONS SYSTEMS FOR THE SURVIVALIST

This subject was originally published in 1984. Since then, many advances have occurred that have opened up new vistas for the survivalist.

This paper hopes to deal with these new considerations and to clarify some of the information presented in the old papers.

CHOICES

It is difficult to decide which piece of equipment would be best for every situation. The lists of possible makes and models are endless.

Also, what I might choose for backpacking might not work very well for home use; and what I choose for my home might not work well for my vehicles.

That is why when we list some makes or models as examples, please understand, these are not your only options nor are they necessarily the right choices for you.

ONLY YOU CAN MAKE THESE DECISIONS! This paper will hopefully provide the information you need to make informed decisions.

AM/FM RADIOS

Most of us listen to the radio for entertainment and news. I hope everyone has one of these radios in their homes, cars, businesses and backpacks.

These radios provide commercial programming (music) and also give some darn fine news coverage for your area. This news includes traffic, weather, political information, local and national stories, and a host of other programming.

Some stations carry financial commentaries, other carry Paul Harvey or Rush Limbaugh or other conservative hosts, and still others carry the liberal forms of news, National Public Radio.

Find those stations in your area that are good for your needs and listen to them when you have the time.

PS: Many AM/FM radios today have cassette tape or CD playing capability. With books being read onto tape and available nowadays, this is a good way to get additional information, schooling, or other entertainment when you are struck commuting in your cars. Check your local bookstores for these tapes on books or watch the catalogs that often come out offering books on tape.

Broadcast radio will be among the first facilities repaired after a disaster. Many will not be knocked out at all in bad storms because they have backup transmitters and auxiliary power. Don't miss this important source of information, news, and entertainment.

WEATHER/EMERGENCY ALERT RADIOS

Weather radios are like regular radios, except they are set up to receive only on one or two frequencies. These frequencies depend on your area National Weather Service station, and the frequency it is broadcasting on. It provides a continuous stream of information on weather forecasts, warning, watches and weather advisories. Get the best radio you can afford to listen in to the weather and a battery-powered capacity would not hurt either if you have a chance to get one with this option.

Emergency Alert Radios are activated by the Emergency Broadcasting Alert Tone. They come on when a radio station does their Emergency Broadcasting Alert Tone and it plays what the radio station says. These radios are nice in that they provide an automatic radio in an emergency broadcast situation.

Both these radios can be had from electronics stores, Radio Shack, or through electronics catalogs virtually anywhere.

SCANNERS

Scanners can be a lot of fun. They can scan up to 50 frequencies or you can monitor one or two frequencies with it and just scan the other frequencies occasionally.

Most scanners nowadays are the programmable type that uses modern technology and does not require you to stock expensive crystals of certain frequencies to be able to hear these frequencies.

Scanners come in all shapes and sizes, from hand-held types to base station mega-sized types.

Being able to monitor police frequencies, civil aviation and even some military frequencies might prove useful. Some scanners will even reach into the cellular phone range and monitoring these frequencies can be entertaining as well as informative.

WARNING – WARNING – WARNING! – There are many laws on the books that might make it illegal for you to monitor police, Civil Aviation, military or cellular communications! You must know the laws in your state, city and this country to be sure you are not breaking the law!

WALKIE TALKIES

These are usually one or two channel (frequency) hand-held radios useful for up to a quarter of a mile or as long as you are in direct line of sight.

Many walkie talkies can be picked up on scanners or CBs if they are in the correct frequency range.

If you are interested in walkie talkies, get the most rugged one you can. Hand microphones and headsets as well as larger whip antennas will help make communication easier and better to understand.

CBs

Citizen Band radios, or CBs as they are popularly known, are great little radios. They are usually better than walkie talkies because they have more than 2 channels to choose from.

Their range is a little more than a walkie talkie also, probably up to a 5-mile range if conditions are right. CBs are line of sight type of radios also. So if you are on top of a mountain, you have a bit more range than if you were in a valley. These radios can get messages from you to others and get help to stranded motorists. Other than an AM/FM radio, this is one device I think everyone should have or consider getting.

CELLULAR PHONES

In the last five years, cellular phones have really taken off. You can now call from virtually anywhere and reach just about anyone if you know their telephone number.

I use cellular phones as an emergency phone when I am hiking in the mountains, or in my vehicle, or home. Making regular calls from a cellular phone is very expensive as charges start the second you begin dialing. You also have a monthly maintenance fee you have to pay, even if you own your own cellular phone.

Used as emergency communications though, they are a bargain.

When a tornado hit our area, the only phone system that worked was the cellular phone system. It was closed down the next day by the authorities because so many folks were calling out for help that the police, firefighters and rescue personnel were swamped with calls. So I am a firm believer that cellular phones are useful devices.

AMATEUR RADIO – HAM RADIO

It is now possible for a person to get their amateur (ham) radio license and not know the Morse code. The license is called the NO CODE TECHNICIAN and consists of 55 questions from a standard 300-question pool. Yes, they are asked and printed just like the questions in the back of the books (study guides).

Of course learning the code is a bit difficult, but once you get your license you can get on the air and begin learning code on your own time without the pressure of learning other items also. You can then take the 5-word-per-minute code test and if you pass it, you will have your license upgraded to the regular TECHNICIAN license. You can purchase ham equipment without being a licensed ham operator, but you cannot transmit without this license.

There is a lot of equipment on the market, and there is also a lot of used equipment on the market, and there is also a lot of used equipment at ham-fests or other amateur radio get-togethers.

After the tornado in our area and after the cellular phone system was shut down, the only way to get help was to go to the local ham radio center where volunteers were set up to help citizens get messages out to loved ones, to builders or to police or rescue personnel.

If you will study this book – now you're talking by the ARRL - for 15 minutes a day and take the tests in the back of the book, in a month you will be ready to take the test.

GET YOUR AMATEUR RADIO LICENSE IF YOU CAN. IT IS EASY AND THE BENEFITS ARE OUTSTANDING!

SOUND-POWERED PHONES

These were originally military surplus items that hooked up to field wire and allowed soldiers to communicate with each other without the use of radio or the use of runners. This type of phone was also used in the early United States. Remember the old crank telephones? This is the same thing.

Nowadays though, there are companies making phones, wire, switchboards and the whole gamut of accessories for civilian uses. These would be useful for permanent sites and for industrial uses. They would be useful in a field situation also if properly cared for.

MILITARY SURPLUS GEAR

There are a lot of sources for military surplus gear on the market. Much of it is junk! The military uses communication gear hard and wears it out thoroughly before disposing of it. Most of it has odd operating voltages/amperages which differ from most commercially available equipment. Connectors, parts or accessories are difficult to come by. Most pieces require some modification or repair to be used. **LASTLY, THE FCC WILL NOT PROVIDE LICENSES TO OPERATE MOST SURPLUS EQUIPMENT.**

Overall I would recommend against getting military surplus equipment to use as your communication gear. Unless of course you are familiar with the equipment, are not worried about a license to operate it, and know how to repair it.

The following sources might have some of the parts or radios that you are interested in:

Bren-Tronics, Inc.
10 Brayton Ct.
Commack NY 11725

Radio Shack

Ancery's Communications
P.O. Box 614
Antioch, CA 94509

Fair Radio Sales Co.
P.O. Box 1105
Lima, OH 45802

Baytronics
Box 591
Sandusky, OH 44870

Michael Murphy
11621 Villa Vista Rd
Lakeside, CA 92040
\$1 and SASE for catalog

Atlantic Surplus
3730 Nautilus Ave
Brooklyn, NY 11224

Space Electronics
33 Ruta Ct.,
S. Hackensack, NJ 07606

Slep Electronics Co.
P.O. Box 100
Otto, NC 28763

Leeds Radio Co.
57 Warren St.
New York, NY 10007

Please have the model of the equipment you are looking for and the condition it is in before contacting these sources. This will help them provide you with the information you need. If you are interested in just their catalogs or general information, please include a dollar or two, plus a self-addressed stamped envelope (SASE) when you request their information.

POWER SOURCES

Most of the commercially available radios operate on household current, batteries, or has plug-in capability to operate off of the battery of a car or other vehicle.

Power inverters are commercially available at reasonable prices that plug into the cigarette lighter of your vehicle if your radio does not have the plug-in availability built in.

Solar panels (sunlight required) can also produce enough power to run and even charge a battery or radio. And these are also in the affordable range.

NICAD batteries and alkaline batteries are all good and should be stocked up on. Most times NICADS can be recharged year after year and still work very well. Alkaline can be recharged a time or two, but they are not as good as NICADS.

EMP

Electromagnetic pulse is caused by a high altitude nuclear blast. Its damage is like a lightning strike/power spike in that it overloads and burns out modern solid state, integrated circuits. Older vacuum tube equipment is less susceptible to damage.

Basically EMP damage is like the power spike of a lightning strike. You know how lightning runs in on wires and burns up your TV or blows the circuits of your radio clock. Well the same type of event happens in EMP. Only in EMP damage is to irreplaceable circuits. Protecting your equipment from EMP or lightning damage is crucial. Circuit breakers, Faraday cages or other precautions need to be taken to keep your equipment safe. (Storage in metal containers/cabinets for backup equipment to replace the stuff that you lost?), RF filters in the line to help filter or keep this stuff from running on your equipment, etc.

Any and all precautions that you feel are necessary are those you should consider.

READING

There are a number of magazines out that deal with radio communications: CQ, The Amateur Radio Magazine and many others. Go to your local bookstore and look in the magazine section for those magazines that interest you.

Other magazines to consider: The American Survival Guide, Soldier of Fortune, Mother Earth News, Backwoods Home Magazine, Popular Communications, Popular Science, and Popular Mechanics.

Other sources of communications to consider: Computer communications, Internet or other online services, voice encryption devices for radios or phones or letters using PGP types of programming, and satellite phone communications, (which is like cellular phone service but much more versatile). This is still in the research stage and the phones weigh about 10 pounds each, but great strides are being made to get this technology working and available to the public. Maybe in a few years, we will have to include this cellular satellite phones in the revised edition of this subject.

I hope that this has provided you with the basic information for you to make informed decisions about your communications needs and choose the types of radios, phones or other devices that will suit your needs.