

Emergency Communications

By:

Rick Knapp
KE7FHK



*Why me?
Why now?*



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KE7FHK@ARRL.ORG

Emergency Communications

Each year hundreds of thousands of Americans volunteer their time and energies for the improvement and safety of their communities.

Mechanics turn into firemen when the alarm sounds. Hairdressers become EMT's .

Engineers turn into auxiliary policemen.

America has a long and proud history of these "Minutemen" who answer the call to service in times of emergency....

And a lot of them are "Hams!"

Emergency Communications

Assumptions:

- You have an Amateur Radio License,
 - or, are interested in getting one.
 - and some degree of technical savvy.
- There is no one *right* way
 - These are some of my thoughts with input from Mentors and Elmers much more experienced than I.
 - We'll try to deal with the BIG picture and leave the minutia for the next time we get together.
- I encourage your questions.
- We only have 50 minutes.

Emergency Communications

OUTLINE

- Definition of Emergency
- Communication Methods
- Preparing for Emergency
- Communicating during Emergency

Emergency Communication

- What is an Emergency
 - Flat Tire
 - Staying late at the office
 - ½ Price Sale at Kohls
 - Natural Disaster
 - Wind storm, Snow Storm, Washougal River over it's banks
 - I5 Bridge out,
 - Wife is in Labor, Girl Friend in Labor, You're in Labor
 - Terrorist attack
 - Danger to Property
 - Danger to Life
 - What does FCC say

Emergency Communications

Subpart E--Providing Emergency Communications

§97.403 Safety of life and protection of property.

No provision of these rules prevents the use by an amateur station of any means of radio communication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

§97.405 Station in distress.

- (a) No provision of these rules prevents the use by an amateur station in distress of any means at its disposal to attract attention, make known its condition and location, and obtain assistance.
- (b) No provision of these rules prevents the use by a station, in the exceptional circumstances described in paragraph (a), of any means of radio communications at its disposal to assist a station in distress.

HOWEVER...

Emergency Communications

- Methods of Communication
 - Mail
 - Phone (Land Line, Cell, VoIP)
 - Email (Internet)
 - Text Messaging
 - Radio:
 - CB, FRS, GMRS, Commercial
 - Amateur Radio (Voice & Digital)
 - UHF/VHF/HF

Emergency Communications

- Weaknesses of standard communications methods
 - Limitations
 - Disruption of Services
 - Universality
 - Who can you communicate with?
 - Who do you want to communicate with?
 - What communication assistance can you help provide?

Emergency Communications

- Preparing to Communicate in an Emergency
 - Prepare Yourself
 - Prepare Your Family
 - Prepare Your equipment
 - What you need
 - What you don't need

Emergency Communications

- Preparing for an Emergency
 - Emergency Contact Card
 - Designate an out of state contact
 - Have a Family Plan & Practice it
 - 12 / 24 / 72hr Kits: *(at home, in each car, at work)*
 - Appropriate Radio *(keep it charged up)*
 - Radio Manual *(user guide/cheat sheet)*
 - Alternative/ Emergency Power *(Anderson Power Poles)*
 - Portable Antenna *(make one..it's fun)*
 - *Backup Radio*

Emergency Communications

Resources:

www.emergency-radio.org (ARRL sponsored)

www.ccareswa.org (Clark County ARES Team)

www.ready.gov (Emergency Preparedness)

www.fema.gov (Source for on-line NIMS Training)

www.citizencorps.gov/cert/ (CERT Info)

[Radio_Jump_Kits](#) (Yahoo Groups)

....Just do a Google Search, you'd be amazed what you can find

Emergency Communications



For better or worse, Emergency Planning has become an important part of our society. Each of us is being asked to develop the abilities to help ourselves and others in a disaster. Would you bet your life that the phones and Internet will still be working? Would you bet the lives of others? Even if they still function, phones and email based systems can be overwhelmed in a crisis, while critical calls are often blocked.

Emergency Communications in Clark County

Clark County ARES/RACES is a volunteer organization of FCC licensed Amateur Radio operators whose major purpose is to provide county-wide emergency communications. In Clark County, the ARES/RACES organization is a dual organization. It can operate as Amateur Radio Emergency Service (ARES), sponsored by the American Radio Relay League (ARRL); or it can operate as Radio Amateur Civil Emergency Service (RACES), which is administered by the Federal Emergency Management Agency (FEMA) under Federal Communication Commission (FCC) rules (Part 97, Subpart E, Section 97.407). Which role the organization takes depends upon the particular emergency or disaster situation as follows:

ARES provides emergency communications for non-governmental organizations (public and private) and local governmental agencies in times of “non-declared” emergencies or disasters. Operation is governed by this ARES/RACES plan, which is interfaced with the Clark County Comprehensive Emergency Management Plan and the Washington State RACES Plan. A secondary purpose of ARES is to provide non-emergency, public service, communications for county agencies or other qualified organizations at the discretion of ARES officers.

RACES on the other hand, provides emergency communications for governmental agencies only, during officially “declared” emergencies or disasters (usually declared at the county, state, or federal level). Operation is governed by this ARES/RACES plan, the Clark County Comprehensive Emergency Management Plan and the Washington State Radio Amateur Civil Emergency Service (RACES) Plan.

The purpose of this plan is to provide guidance, establish responsibility, and ensure coordinated operations between Clark County Emergency Management officials and the ARES/RACES organization during times when there are extraordinary threats to the safety of life and/or property. Maximum benefits from the ARES/RACES organization can be obtained only through careful planning which identifies the organizations, agencies, and individuals concerned and assigns a definitive role to each. This plan enables agencies and organizations having emergency responsibilities to include the ARES/RACES organization in local emergency plans and programs.

Emergency Communications

Some Required Courses/Training for Emergency Workers:

- ICS-100 Introduction to ICS (Incident Command System)
- ICS-200 Basic ICS
- ICS-300 Intermediate ICS (Classroom only)
- ICS-400 Advanced ICS (Classroom only)
- IS-700 Introduction to NIMS, National Incident Management System
- IS-800 Introduction to National Response Framework

ARES members are registered with the state as emergency workers

Emergency Communications

Clark County ARES Team Organization

Team #	Name	Frequency	Leader	Call
0	Management	none	Gary Takis	K7GJT
1	North County	146.455 simplex	Al Lewey	K7ABL
2	East County	146.490 simplex	Rich Stewart	KJ7RD
3	Orchards	146.550 simplex	Robert Sisson	KE7IYU
4	Cascade Park	146.475	Don Young	N7DY
5	Vancouver	147.495 simplex	Mike Fogarty	AC7RU
6	West County	147.510 simplex	Chip Chuprinko	WB7TFD
7	Net Control	147.240+ duplex	Don Peter	ND7P
8	SW Med Ctr	147.570 simplex	Ron Miller	WB6JGV
9	Clark EOC	146.565 simplex	Vernon Smith	KA7DCQ
10	Red Cross	147.420 simplex	Tom McConathy	KC7OZJ
11	SAR	147.555 simplex	Jardy Dawson	KE7FHH
12	Legacy Hosp	146.580 simplex	John Allen	N9YQ
99	Standby			
100	Associates			
200	Packet Only	144.990		
999	Inactive Mbrs			

Emergency Communications

Getting your Message across:

What makes good communication?

- » Calm, Clear & Professional
- » Brevity
- » Standardization
- » Forms
- » Phonetics

RADIO MEMORY CHANNELS CHART - APRIL 2006

In order to have our radio equipment be somewhat standardized for use during an emergency, we ask that each member program equipment that has memory channels program at least the first 40 channels with a standard set of frequencies. Some radios have memory banks that can be used to organize frequencies in a similar manner.

Some radios have computer software that makes programming your radio much easier. Save some frustration and work by getting the computer software if possible. If you cannot obtain the software then enjoy getting to know how to program your radio's memory channels.

Memory #	Frequency Use	Memory #	Frequency Use
1	146.445s - Team 1 N. County	21	146.780- Corvallis
2	146.490s - Team 2 E. County	22	146.480- PARC
3	146.550s - Team 3 Orchards	23	147.020+ SALEM
4	147.450s - Team 4 Cascade Park	24	147.040+ AARG
5	147.495s - Team 5 Vancouver	25	147.060+ BAWFAW (tx 110.9)
6	147.510s - Team 6 Hazel Dell	26	147.100+ Hood River (tx 100.0)
7	147.240+ - Team 7 Net Ctrl	27	147.120+ Mt Hood
8	147.570s - Team 8 Hospital	28	147.260+ Longview (tx 114.8)
9	146.565s - Team 9 EOC	29	147.300+ Woodland (tx 114.8)
10	147.420s - Team 10 Red Cross	30	147.320+ OR Dist 1 ARES
11	146.535s - Team 11 Silver Star	31	148.150 CAP
12	146.580s OPS Channel	32	154.815 Cowlitz CSO
13	not used	33	155.160 WA State SAR
14	144.440s Cowlitz ARES	34	155.370 LERN
15	146.520s Calling	35	156.800 Marine Emerg
16	147.555s SAR	36	155.070 CTRL 2 CCSO
17	147.585 H.E.A.R.T (tx 218.1)	37	154.070 CTRL 7 Fire
18	146.595s ACS DR (tx 110.9)	38	154.370 CTRL 8 Fire
19	145.150- GORGE (tx 94.8)	39	154.680 WSP
20	146.660- Astoria (tx 118.8)	40	162.550 NOAA WX
Shaded simplex Team frequencies use 94.8 tone		147.240s Call Channel (tx 131.8)	

INTERNATIONAL PHONETIC ALPHABET

A	ALPHA		N	NOVEMBER
B	BRAVO		O	OSCAR
C	CHARLIE		P	PAPA
D	DELTA		Q	QUEBEC
E	ECHO		R	ROMEO
F	FOXTROT		S	SIERRA
G	GOLF		T	TANGO
H	HOTEL		U	UNIFORM
I	INDIA		V	VICTOR
J	JULIET		W	WHISKEY
K	KILO		X	X-RAY
L	LIMA		Y	YANKEE
M	MIKE		Z	ZULU

Don't forget numbers... *admittedly my pet peeve*



THE AMERICAN RADIO RELAY LEAGUE

RADIOGRAM

VIA AMATEUR RADIO



NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
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<p>TO</p> <p>TELEPHONE NUMBER</p>	<p>THIS RADIO MESSAGE WAS RECEIVED AT</p> <p>AMATEUR STATION _____ PHONE _____</p> <p>NAME _____</p> <p>STREET ADDRESS _____</p> <p>CITY, STATE, ZIP _____</p>
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REC'D	FROM	DATE	TIME	SENT	TO	DATE	TIME
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<p>THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARRL HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 06111</p>	<p>THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHER OF QST MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATION AMONG AMATEUR OPERATORS. TO THAT END, THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.</p> <p style="text-align: right;">PRINTED IN USA</p>
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Radio Amateur Civil Emergency Service / Amateur Radio Emergency Service

RACES / ARES MESSAGE FORM

(for use with city & county EOC, Fire, Police, Red Cross, etc.)

MSG # _____ PRECEDENCE: _____ Time filed (LOCAL): ____ : ____ AM PM 24HR DATE: _____
E = Emergency, P = Priority, R = Routine, W = Welfare (mmmddyyyy or mm/dd/yyyy)

TO: _____ LOCATION: _____
(Receiving Official)

FROM: _____ LOCATION: _____
(Originating Official)

Message: This is an exercise message. "Break and text:"

"END OF MESSAGE" or "CONTINUE ON NEXT FORM"

11/16/04 ncr (x3) DO NOT TRANSMIT INFORMATION BELOW THIS DOUBLE LINE. OPERATOR FILL IN ONLY

Radio Location: _____ Received: _____ (24 hr.)

Radio Operator: _____ Sent: _____ (24 hr.)
(Call Sign Only)

Emergency Communications

“Amateur Radio is a hobby,
Emergency Communications
is a commitment.”