

Eastern Pennsylvania Section Amateur Radio Emergency Services (ARES®)

FIELD REFERENCE MANUAL

DRAFT: April 22, 2009



EPA Section Reference Manual



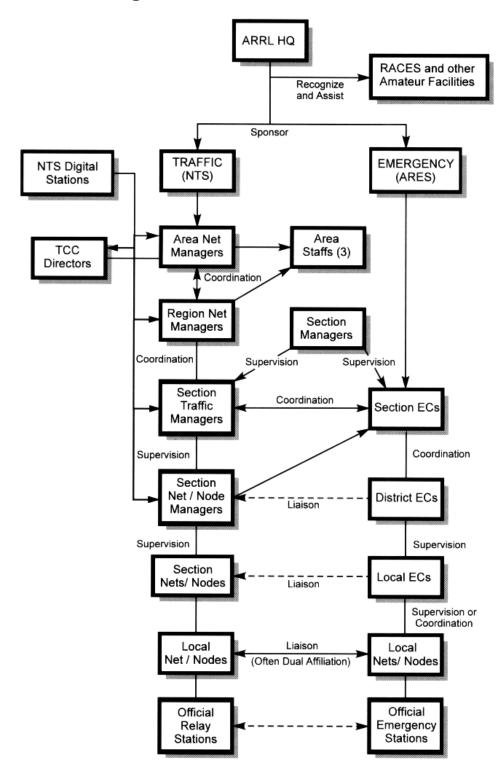
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ARRL ARES/NTS organization







Principles of Disaster Communications

- **1. Keep the QRM level down**. In a disaster, crucial stations may be weak. All other stations should remain silent unless they are called upon. If you're not sure you should transmit, don't.
- **2. Monitor established disaster frequencies**. Many ARES localities and some geographical areas have established disaster frequencies where someone is always (or nearly always) monitoring for possible calls.
- **3. Avoid spreading rumors**. During and after a disaster situation, especially on the phone bands, you may hear almost anything. Unfortunately, much misinformation is transmitted. Rumors are started by expansion, deletion, amplification or modification of words, exaggeration or interpretation. All addressed transmissions should be officially authenticated as to their source. These transmissions should be repeated word for word, if at all, and only when specifically authorized.
- **4. Authenticate all messages**. Every message which purports to be of an official nature should be written and signed. Whenever possible, amateurs should avoid initiating disaster or emergency traffic themselves. We do the communicating; the agency officials we serve supply the content of the communications.
- **5. Strive for efficiency**. Whatever happens in an emergency, you will find hysteria and some amateurs who are activated by the thought that they must be sleepless heroes. Instead of operating your own station full time at the expense of your health and efficiency, it is much better to serve a shift at one of the best-located and best-equipped stations, suitable for the work at hand, manned by relief shifts of the best-qualified operators. This reduces interference and secures well-operated stations.
- **6. Select the mode and band to suit the need.** It is a characteristic of all amateurs to believe that their favorite mode and band is superior to all others. However, the merits of a particular band or mode in a communications emergency should be evaluated impartially with a view to the appropriate use of bands and modes. There is, of course, no alternative to using what happens to be available, but there are ways to optimize available communications.
- **7. Use all communications channels intelligently.** While the prime object of emergency communications is to save lives and property (anything else is incidental), Amateur Radio is a secondary communications means; normal channels are primary and should be used if available. Emergency channels other than amateur which are available in the absence of amateur channels should be utilized without fear of favoritism in the interest of getting the message through.
- **8. Don't "broadcast."** Some stations in an emergency situation have a tendency to emulate "broadcast" techniques. While it is true that the general public may be listening, our transmissions are not and should not be made for that purpose.
- **9. NTS and ARES leadership coordination**. Within the disaster area itself, the ARES is primarily responsible for emergency communications support. The first priority of those NTS operators who live in or near the disaster area is to make their expertise available to their Emergency Coordinator (EC) where and when needed. For timely and effective response, this means that NTS operators should talk to their ECs before the time of need so that they will know how to best respond.





Ready-Kits

Basic One Day Ready-Kit

•	ARES/	RACES	ID Card
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- Copy of FCC License
- Dual Band HT
- Extra Batteries
- Speaker/Mic and Headphones
- SMA/BNC Adapters
- "Tiger Tail" for HT antenna
- Cigarette Lighter Adapter
- 2-Meter Gain Antenna and Coax

ADDITIONAL RECOMMENDED

 Mobile/Portable Dual Band Radio or "Brick" amplifier for HT

- Paper and Pencils
- "Leatherman" type Multitool
- Appropriate Clothing
- Food and Water and Snacks
- Small First Aid Kit
- Moist Towelettes
- Mini Flashlight and Extra Batteries
- Emergency Gas/etc. Money
- Cell Phone and Charger
- Portable Car Battery Jumper Pack
- •

The above list is a suggested kit based upon experience, but it should be noted that the best kit for "you" is not necessarily a canned kit, but one that you should base upon your own operating mode, experience and local conditions. It is better to have the bare essentials always handy than to leave a bulky pack someplace where you can't get to it.

The bare essentials are a 2-meter or dual-band HT, some sort of "gain" antenna, auxiliary power source, writing materials, and comfort and safety items. You can do a lot with a minimum kit, if you plan its contents carefully. There is always the risk of not having something you may need if you go "too" light, but obvious "bells and whistles" should stay home.

The majority of these items should be kept in a "Ready Kit." Just pick it up on your way out the door for deployment. You might also consider the items on the following list for inclusion in this ready kit, designed to allow you to stay in the field for up to 72 hours.





Extended 72 hour Ready-Kit

- Additional Radios, Packet Gear
- Power Supplies, Chargers
- SWR Meter (VHF and HF)
- Extra Coax
- RF Connectors
- Patch Cords
- Spare Fuses
- VOM Multimeter
- Basic Tools
- Soldering Iron and Solder
- Electrical and Duct Tape
- Electrical Connectors (Anderson PowerPole)

- Personal Toiletry/Hygiene Items
- Personal Prescriptions
- Aspirin, Lozenges, etc.
- Additional Snacks and Drinks
- 3 Day Supply of Non-Perishable Food
- 3 Day Supply of Drinking Water
- 3 Day Change of Clothes
- Foul Weather Gear
- Portable Stove (Sterno)
- Mess Kit and Utensils
- Shelter (Tent and Sleeping bag)
- Candles and Waterproof Matches

The trunk is the best place to store emergency gear because it is dry, relatively secure and is accessible either at home or away. An "everyday" "basic" kit stashed in the car provides the bare essentials for a short term deployment or event like a marathon or walk-a-thon with an HT, extra batteries, coax and power adapters, basic tools, first aid kit, and Snacks and Water, and emergency cash.. The "disaster" bag has items necessary for a longer duration and includes additional, food, water, rain gear, a larger gel cell battery, clothing and shelter to sustain a 3-day activation or evacuation.





Additional Ready-Kit Notes

Power -- Your 72-hour kit should have several sources of power in it, with extra battery packs and an alkaline battery pack for your HT. For mobile VHF and UHF radios, larger batteries are needed. Gel-cell or deep cycle marine batteries would be good sources of battery power, and you must keep them charged and ready to go.

It is also wise to have alternate means available to charge your batteries during the emergency. You can charge smaller batteries from other larger batteries. You can build a solar charging device. And, if you're lucky, you may have access to a power generator that can be used in place of the normal electrical lines. Have more battery capacity than you think you might need. Have several methods available to connect your radios to different power

Gain Antennas -- You can expect to need some kind of gain antenna for your HT, as well as an additional gain antenna that can be used on either your HT or your mobile rig. The extra antenna might be needed by someone else, or your first antenna might break.

For VHF and UHF, you can build a J-pole from a TV twinlead, for an inexpensive and very compact antenna. Have several lengths of coax in your kit, totaling at least 50 feet and with barrel connectors to connect them together.

Personal -- This include staples: water, or a reliable water filtration and purification system; enough food for three days; eating utensils, a drinking cup and, if needed, a means of cooking your food.

Shelter is also important. Here, you are only limited by the size of your kit and the thickness of your wallet. Some hams plan to use their RVs as shelter, conditions permitting. Other disaster conditions may make the use of an RV impossible, so you should have several different plans for shelter.

Light -- This is important psychologically during an emergency. Make sure that you have several light sources available. Various battery-powered lights are available, and propane or gasoline-fueled lanterns are also good possibilities.





ARES/RACES Nets

HF Nets:

Net Type	Freq.	Mode	Day/Time	Description
Eastern Area Net (EAN)	7.24300	LSB	1430 ET	NTS Traffic Net
3rd Region Net (3RN)	7.24300	LSB	1600 ET	NTS Traffic Net
Eastern PA Phone and Traffic Net (EPAEPTN)	3.91700	LSB	1800 ET	NTS Traffic Net
Pennsylvania Phone Net (PFN)	3.95800	LSB	1730 ET	
Eastern PA. Section Net (EPA)	3.61000	cw	1900 ET/ 2200 ET	NTS CW Traffic Net
Penna. Traffic Training Net (PTTN)	3.61000	cw	1830 ET	CW training net for NTS (slow speed Morse)
Western PA Phone and Traffic Net (WPAEPTN)	3.9830 Backup on 7.243 & 1.897	LSB	1800 ET	NTS Traffic Net
Western PA. Section Net (WPA)	3.5850	cw	1900 ET	NTS CW Traffic Net

Other HF Nets:

PEMA/RACES	3.9875	LSB	0900 ET Sun.	Eastern PA RACES
PEMA/RACES	3.9935	LSB	0830 ET Sun.	Central PA RACES
PEMA/RACES	3.9905	LSB	0900 ET Sun.	Western PA RACES
PEMA/RACES	3.9935	LSB	0800 ET 1 st Sun.	Statewide PA ARES
ARES	3.9830 7.2720	LSB		Western PA ARES NET
PEMA/RACES	3.9845	LSB		Backup
PEMA/RACES	3.9995	LSB		Backup
PEMA/RACES	7.2540	LSB		Backup
PEMA/RACES	7.2505	LSB		Backup





Radiogram



THE AMERICAN RADIO RELAY LEAGUE RADIOGRAM



REAL	y			VIA AMATE				Toyal Park
Number	Pred	CEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	Date
To:					THIS RA	DIO MESSAGE WA	AS RECEIVED	AT:
					AMATEUR : NAME: STREET AL CITY, STAT	DDRESS:	Date:	
TELEPHO	NE NU	JMBER:						
Sig:	F	ROM	DATE	TIME		TO DA	TE	TIME
REC'D					SENT	.0		
A licensed Amateur Radio Operator, whose address is shown above, handled this message free of charge. As such messages are handled solely for the pleasure of operating, a "Ham" Operator can accept no compensation. A return message may be filed with the Ham delivering this message to you. Further information on Amateur Radio may be obtained from ADDL beadquarters. 37 Mais Street Newigeton CT 04111				ssages are handled rator can accept no h the Ham delivering this Radio may be obtained	of licensed radio functions is prom Operators. To the	adio Relay League, Inc. is t amateurs and the publishe otion of public service com at end, The League has orç nationwide message handli	r of QST Magazine. C munication among Ar ganized the National T	One of its mateur

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<u>Number</u>: This is the station of origins message serial number. Usually starts with "1" for a new Year or Month.

<u>Precedence</u>: This is a code letter that tells how critical a message is and how fast it must be handled: (Routine, Health & Welfare, Priority or **Emergency**)

<u>Handling Instruction(s)</u>: These are optional instructions to the operators regarding special needs in handling the message, using standardized "HX" codes.

<u>Originating Station</u>: Call of the Amateur Radio station that originally creates or writes the original message.

<u>Check:</u> A count of the words and number groups in the message text only. The signature is not counted,

<u>Place of Origin</u>: This is the actual place where the message started from, not necessarily the location of the station of origin. For example, if you send a message for a person in a town that is not your own, you use the person's own town

<u>Time Filed:</u> In 24 hour ZULU time, but is rarely used anymore, except in Emergency Traffic.

<u>Date:</u> Date Message was written – usually just Month and Day, and must be consistent with UTC if UTC used as the time format

Amateur Radiograms should be limited to 25 works or less. They must be noncommercial in nature and thus acceptable from ham radio transmission.





Filling Out The Radiogram

The ARRL Radiogram is used to pass a "Formal" message. The word "Formal" means that the message follows a pre-established form or convention. A formal message contains all the necessary "Recordkeeping" elements that are required to keep a history of the message as it is sent through the NTS., and also to assure that a sender-to-receiver trace can always be done on the message., and consists of four parts:

The **PREAMBLE**: --- This part of the message is the record-keeping part. It is read on the air first from left to to right and always in this order. Only the handling instructions and time of the file blocks are optional and may, if not needed, be eliminated by the originating station only.

The **ADDRESS**: --- This part of the message is information about the party to whom the message is being sent. The address consists of the standard three-line postal address, with Zip Code, and a fourth line listing the Addressees' complete phone number. The Zip Code is important if the message will go via Packet at any point, and a complete phone number will save the delivering station time and effort. For messages going to foreign countries, make absolutely sure that the USA has a third-party agreement with the country to which the message is going or can be routed from the USA to a country that does have a third-party agreement with the country of destination.

The **TEXT**: --- The text is what the sender of the message wants to tell the addressee. Good amateur radio texts sound like telegraph messages, are clear and succinct and written in such a way that their meaning cannot be misconstrued or interpreted in more than on way. Good amateur message writing takes practice

Putting a letter-like greeting or closing (Dear Dad, You Son, etc.) into the text is bad form, but if you must, it belongs in the text and is part of the check Spell words that could be misspelled by the receiving station. Don't assume that others know how to spell a particular word. Also spell words that can have more than one spelling.

Use no punctuation in messages, even apostrophes; just spell it out. And separators (periods and dashes) are written as **X**'s, and read as "initial X-RAY". But, this is only during transmission on the air – They are not read as "X-Ray" to the final addressee. All Phone numbers in the text are broken up like so:. **910 535 5512** and have a check count of three.

Groups of numbers or letters count as one word (e.g. "4683" or "USA" each count as 1 word). ARL numbered texts are spelled out (i.e., ARL FORTY SIX), and if the letter "X" is used to designate periods, then each "X" is counted as a word

The **SIGNATURE:** --- like the address, should be as comprehensive as needed to completely identify the sender to the Addressee. Family members may use single name signatures. For other messages, it is best to use first name and surname both. Closings, like Love, Regards, etc. are ALWAYS a part of the text and not the signature.





A Typical message might read as follows:

NR 12 R W1XDY CK 14 HOMETOWN PA JUL 12

JOHNNY DIAMOND 1725 PENNYWISE RD ANYTOWN ME 18951 PHONE 273-555-1212

JOHNNY IVE ARRIVED SAFELY AFTER LONG DRIVE FROM BANGOR CALL ME 676 888 5151

LOIS

ARRL Recommended Precedences

Please observe the following ARRL provisions for PRECEDENCES in connection with written message traffic. These provisions are designed to increase the efficiency of our service both in normal times and in emergency.

EMERGENCY--Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be *very* rare. On CW/RTTY, this designation will *always* be spelled out. When in doubt, do not use it.

PRIORITY--Use abbreviation P on CW/RTTY. This classification is for A) important messages having a specific time limit B) official messages not covered in the emergency category C) press dispatches and emergency-related traffic not of the *utmost* urgency D) notice of death or injury in a disaster area, personal or official.

WELFARE--This classification, abbreviated as W on CW/RTTY, refers to either an inquiry as to the health and welfare of an individual in the disaster area or an advisory from the disaster area that indicates all is well. Welfare traffic is handled only after all emergency and priority traffic is cleared. The Red Cross equivalent to an incoming Welfare message is DWI (Disaster Welfare Inquiry).

ROUTINE--Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine (R on CW/RTTY) should be handled last, or not at all when circuits are busy with higher precedence traffic.

Note--the precedence always follows the message number. For example, a message number may be 207R on CW and "Two Zero Seven Routine" on phone.





Handling Instructions

HXA--(Followed by number) Collect landline delivery authorized by addressee to within.X.miles. (If no number, authorization is unlimited.)

HXB--(Followed by number) Cancel message if not delivered within..X..hours of filing time; service originating station.

HXC--Report date and time of delivery (TOD) to originating station.

HXD--Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.

HXE--Delivering station get reply from addresses, originate message back.

HXF--(Followed by number) Hold delivery until.X..(date).

HXG--Delivery by mail or landline toll call not required. If toll or other expense involved, cancel message and service originating station.

ARRL Text Abbreviations

These are used to speed up transmission of messages by assigning numbers to commonly used text in the Radiogram, but these numbers are spelled out in the text.

If ARL Text is included in the message, then the "Check" in the Preamble should be preceded by the letters ARL. The letters ARL are also inserted in the text before the spelled out numbers.

Example:

NR 1 R W1AW ARL 5 NEWINGTON CT DEC 25

DONALD R. SMITH 164 EAST SIXTH AVE NORTH RIVER CITY MO

PHONE 273-507-3968

ARL FIFTY ARL SIXTY ONE

DIANA





Group One—For "Relief Emergency" Use

ONE	Everyone safe here. Please don't worry.
TWO	Coming home as soon as possible.
THREE	Am in hospital. Receiving excellent care and recovering fine.
FOUR	Only slight property damage here. Do not be concerned about disaster reports.
FIVE	Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated.
SIX	Will contact you as soon as possible.
SEVEN	Please reply by Amateur Radio through the amateur delivering this message. This is a free public service.
EIGHT	Need additional mobile or portable equipment for immediate emergency use.
NINE	Additional radio operators needed to assist with emergency at this location.
TEN	Please contact Advise to standby and provide further emergency information, instructions or assistance.
ELEVEN	Establish Amateur Radio emergency communications with on MHz.
TWELVE	Anxious to hear from you. No word in some time. Please contact me as soon as possible.
THIRTEEN	Medical emergency situation exits here.
FOURTEEN	Situation here becoming critical. Losses and damage from increasing.
FIFTEEN	Please advise your condition and what help is needed.
SIXTEEN	Property damage very severe in this area.
SEVENTEEN	REACT communications available. Establish REACT communication with on channel
EIGHTEEN	Please contact me as soon as possible at
NINETEEN	Request health and welfare report on (State name, address and telephone number.)
TWENTY	Temporarily stranded. Will need some assistance. Please contact me at
TWENTY ONE	Search and Rescue assistance is needed by local authorities here. Advise availability.
TWENTY TWO	Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply without delay.
TWENTY THREE	Report at once the accessibility and best way to reach your location.





TWENTY FOUR Evacuation of residents from this area urgently needed. Advise plans for help.

TWENTY FIVE Furnish as soon as possible the weather conditions at your location.

TWENTY SIX Help and care for evacuation of sick and injured from this location needed at once.

Group Two—Routine Messages

FORTY SIX	Greetings on your birthday and best wishes for many more to come.							
FORTY SEVEN	Reference your message number to delivered on at UTC.							
FIFTY	Greetings by Amateur Radio.							
FIFTY ONE	Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators at Am having a wonderful time.							
FIFTY TWO	Really enjoyed being with you. Looking forward to getting together again.							
FIFTY THREE	Received your It's appreciated; many thanks.							
FIFTY FOUR	Many thanks for your good wishes.							
FIFTY FIVE	Good news is always welcome. Very delighted to hear about yours.							
FIFTY SIX	Congratulations on your, a most worthy and deserved achievement.							
FIFTY SEVEN	Wish we could be together.							
FIFTY EIGHT	Have a wonderful time. Let us know when you return.							
FIFTY NINE	Congratulations on the new arrival. Hope mother and child are well.							
*SIXTY	Wishing you the best of everything on							
SIXTY ONE	Wishing you a very Merry Christmas and a Happy New Year.							
*SIXTY TWO	Greetings and best wishes to you for a pleasant holiday season.							
SIXTY THREE	Victory or defeat, our best wishes are with you. Hope you win.							
SIXTY FOUR	Arrived safely at							
SIXTY FIVE	Arriving on Please arrange to meet me there.							
SIXTY SIX	DX QSLs are on hand for you at the QSL Bureau. Send self addressed envelopes.							
SIXTY SEVEN	Your message number undeliverable because of Please advise.							
SIXTY EIGHT	Sorry to hear you are ill. Best wishes for a speedy recovery.							





SIXTY NINE

Welcome to the _____. We are glad to have you with us and hope you will enjoy the fun and fellowship of the organization.

* Can be used for all holidays.





NIMS ICS FORMS

ICS-213 General Message Form (Modified for EPA District 2 use)

GENERAL ME	GENERAL MESSAGE FORM (ICS-21:				3) Message Number:		
TO: (Name/Position)				Orgai	nizatio	n:	
FROM: (Name/Position)				Orgai	nizatio	n:	
SUBJECT:				DATE	Ē:		TIME:
MESSAGE:							
			l B '''				
Signature:			Position				
Received/Sent By:	Fax	RACES	Radio	SE	VAN	Other	
REPLY:							
Date:	Time:		Signatu	ıre/Pos	sition:		
ICC 242							

ICS 213





ICS-211 Check-In Form

Incident Name:		Date Prepared:	Time Prepared:	
Operational Period:	Operational Pe	riod Date/Time: From:	То:	

Print Name	Agency	EOC Position	Date	Time In	Time Out

ICS 211 (07/25/2005)





ICS-205a Communications List

1. Incident Name		2. Operational	al Period (Date / Time) To:	COMMUNICATIONS LIST ICS 205A-OS
3. Basic Local Commun	ications Informa			100 2004 00
Assignment	Nam	ie	Method(s) of contact (radio frequency	, phone, pager, cell #(s), etc.)
4. Prepared by: (Commi	unications Unit)		Date / Time	
· · · · ·	,			
COMMUNICATIONS	S LIST	_	June 2000	ICS 205a-OS





ICS-214 Unit Log

Incident Nan	ne:			Date/Time Prepared:		Pageof
Operational Period #		Operational Period Date/Time:	From:			То:
Unit Name/D	esignator:		Unit Lead	er (Name & Position	on):	
Time		,	Activity/Eve	ents		
Prepared By	:	Agency Name:			EOC Pos	sition:





ICS-204 Assignment List

1. Incident Name		2. Operational Period (Date/Time)					Assignment L	_ist
		From: To:					ICS 204-OS	
3. Branch			4. Divi	ision/Group				
5. Operations Personnel		Name Affiliation			Con	Contact # (s)		
Operations Section Chief:								_
Branch Director:								_
Division/Group Supervisor:								_
6. Resources Assigned This Period "X" indicates 204a attachment with special in							pecial instructions	
Strike Team/Task Force/Resource Identifier	Leader		Contact Info. # # of Persons			Notes/Remarks		+
identine			+		1 6130113			
								
			 					
						-		
			+					\perp
7. Assignments								
8. Special Instructions for Division/	·							
9. Communications (radio and/or phone co						Phone	Pager	_
Emergency Communications Medical		Evacuatio			Other			- - -
10. Prepared By (Resource Unit Leader		Date/	Γime	11. Approved By	/ (Planning Sed	ction Chie	f) Date/Time	Э
ASSIGNMENT LIST		June 2000					ICS 204-C	S





Your Initial Priorities

What to do First in case of an Emergency

Check to make sure that you and your family are safe and secure before you respond as an ARES volunteer.

Check to make sure that your Property is Safe and Secure before you respond as an ARES volunteer.

Monitor your local Repeater Frequency
Follow any instructions you receive from ARES officials on the above frequency
Contact your local Emergency Coordinator or His/Her Designee for further Instructions.
If deployed, Notify your Family as to the location you are being assigned to

Initial Check List

The net control station and/or ARES officials on the designated emergency net will provide additional instructions, including information on frequencies used for other resource and tactical nets. Normally, a resource net will enroll volunteers and provide information on how you can assist.

Be prepared to operate. Check all equipment and connections.

Check-in with your assigned contact. Deploy to assignment with "Ready" kit.

Obtain tactical call sign for your location/assignment.

Initiate personal event log.

Enter assigned frequency(s) on log sheet and on emergency/frequency plan.

Use log form to record messages handled.

Use a formal message form when a precise record is required.

Use tactical call sign for your location, while observing FCC's ten-minute ID rule.

Monitor your assigned frequency AT ALL TIMES. Notify NCS if you have to leave.





Types of Emergency Nets

Tactical Net -- The Tactical Net is the front line net employed during an incident, usually used by a single government agency to coordinate with Amateur Radio operations within their jurisdiction. There may be several tactical nets in operation for a single incident depending on the volume of traffic and number of agencies involved. Communications include traffic handling, and resource recruiting.

Resource Net -- For larger-scale incidents, a Resource Net is used to recruit operators and equipment in support of operations on the Tactical Nets. As an incident requires more operators or equipment, the Resource Net evolves as a check-in place for volunteers to register and receive assignments.

Command Net -- As the size of an incident increases and more jurisdictions become involved in the incident, a Command Net may become necessary. This net allows the incident managers to communicate with each other to resolve inter- or intra-agency problems, particularly between cities, or within larger jurisdictional areas. It is conceivable that this net could become cluttered with a high volume of traffic. It may also be necessary to create multiple command nets to promote efficiency.

Open and Closed Nets -- A net may operate as an Open or "free form" net, or as a closed net where a net control station is used to control the flow of transmissions on the channel. Typically, when the amount of traffic is low or sporadic a net control isn't required, and an Open net is used. Stations merely listen before they transmit. When a net is declared a "closed" net, then all transmissions must be directed by the NCS.