

Amateur Radio Emergency Service (ARES)

Connecticut Section, Region 2

Member Handbook

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Art Fregeau, AF1HS

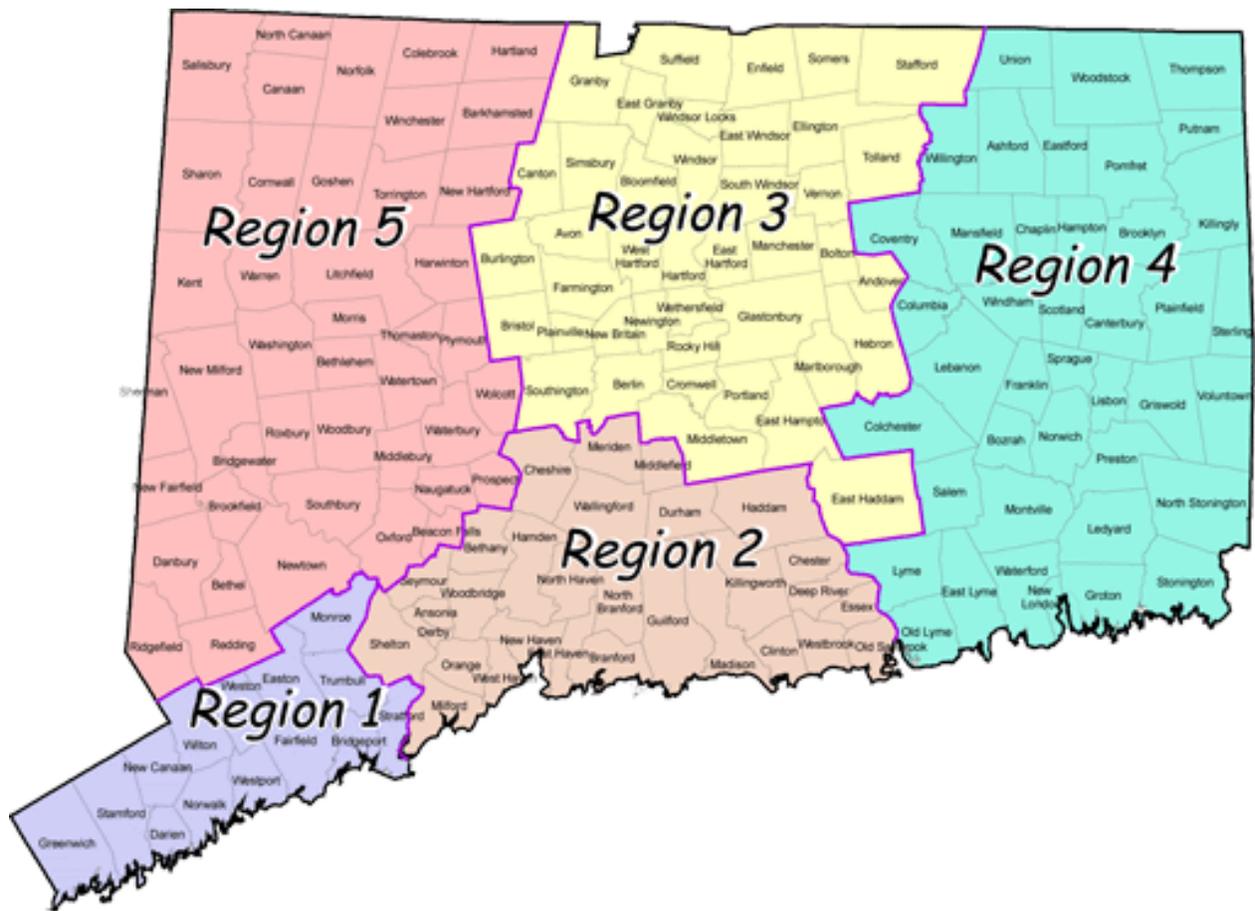


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Introduction:

First and foremost – Welcome!

Thank you for volunteering your skill, time and equipment to provide emergency communications.

Region 2 ARES has undergone a lot of changes, starting in the middle of 2006. This handbook incorporates these changes. If you are new to ARES, then you will find this information useful.

If you have been involved with ARES for a long time, you should replace outdated reference materials with the information you'll find here. We have made a concerted effort to update lists of frequencies, repeaters and contacts in this manual.

Please take the time to give this manual in initial reading in order to understand how Region 2 will operate within the CT Section of the Amateur Radio Emergency Service. Please note training and membership requirements. In many instances, these requirements can be fulfilled in less than 50 hours a year and still keep you updated with all the information you need to be an effective communicator within our region.

A note on the conventions used in this handbook.

You will see frequent references to an appendix at the end of this manual. Though during the initial reading of this manual, it will require some page turning, there is a logical reason for putting the manual together in this fashion.

If you print this out and put it in a binder or plan (and we hope you do!), you should only have to check for updates to the appendix sections. When there is a change, you will most likely find out via email or during one of our regular nets. When this is the case, all you have to do is download the current version and replace the old one. It's that easy.

As of this writing, you can expect frequent changes throughout as the operations are improved and developed throughout the region. Please check the Region 2 ARES websites at <http://www.ctaresregion2.org> or <http://www.af1hs.com> for details.

Again, thank you for taking the time to volunteer for the organization. If I can be of any assistance, feel free to contact me or any of our regional leadership – we're more than glad to help.

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Additional contributions by:

- (A) The Amateur Radio Relay League NTS Public Service Communications Manual and Memorandum of Understanding
- (B) Content: Thanks to E. Jonathan Hardy, KB1KIX, who graciously allowed the use of his material that was originally published for Region 3.
- (C) Amateur Radio Emergency Service, Connecticut Section Training Roadmap, Alert Levels

Our Mission:

The mission of the Region 2 Amateur Radio Emergency Service is to provide emergency and public service communications to our communities in central Connecticut.

The purpose of this plan is for all ARES members to have a resource of basic, yet vital, information available as we fulfill our mission.

These procedures are set forth in accordance to the rules and regulations in the Federal Communications Commission part 97 rules and regulations.

Of particular note, Part 97.1:

SUBPART A—GENERAL PROVISIONS

§97.1 Basis and purpose.

The rules and regulations in this Part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

- (a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
- (b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art .
- (c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communications and technical phases of the art .
- (d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
- (e) Continuation and extension of the amateur 's unique ability to enhance international goodwill.

What is ARES?

The ARRL best describes ARES in their Public Service Communications Manual:

“The Amateur Radio Emergency Service (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible for membership in the ARES.

The only qualification, other than possession of an Amateur Radio license, is a sincere desire to serve. Because ARES is an amateur service, only amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.”

Why Join ARES?

If you are a volunteer interested in emergency communications and want to be "in the know" about training opportunities and want to be on the front lines of service, you will want to get involved and join CT ARES®. Joining means that you have a desire to train and to serve either at home or in the field. It's easy, so read below about the process, come aboard and have fun!

You will also want to join our CT ARES® e-mail list. Go to the <http://www.ctares.org> website and go to “How to Join the Discussion List” and become informed!

Process and Procedures

Introduction

While we actively encourage everyone to register to make life easier for volunteers, the ARES® leadership team and our served agencies, there will be those who have not registered before a disaster occurs. Every effort will be made to accommodate them, but they will need to register, and most likely will be taken aside for training that will be offered every few hours before they are allowed to participate. Obviously, these people will be the junior people on any team.

It is especially important to note that this is not an ARES requirement, but a federal mandate. There are certain training programs (for the federal mandate – these programs are free and offered online) required by the federal government and a few programs offered by the Amateur Radio Relay League. The ARRL courses are not free, but significantly reduced for members.

For more on training, please refer to Appendix III – CT ARES Training Roadmap.

How to Join or Renew

All a potential member has to do is go to [CT ARES Registration page](#) and fill out the online form. A single form is now used to process both new applications and renewals. Joining and renewing are done on-line; the data is submitted into the database and then sent to your DEC.

Membership forms no longer need to be filled out on an annual basis. We do, however, recommend that you regularly update your information (including training accomplishments). Updated data is the only way we may know how to contact you during any event and the qualifications you'll possess when you arrive on site. Most important are working phone numbers and email addresses. Without both of these vital entries, you cannot be reached and will not be a useful member of CT ARES

Why register?

ARES leadership will use the information from your application to determine what duties you can be assigned. When the state or other served agency requests amateur radio operators from ARES, only qualified names from the data base will be submitted for duty at secure locations such as EOC's, public safety complexes, shelters, or incident command posts.

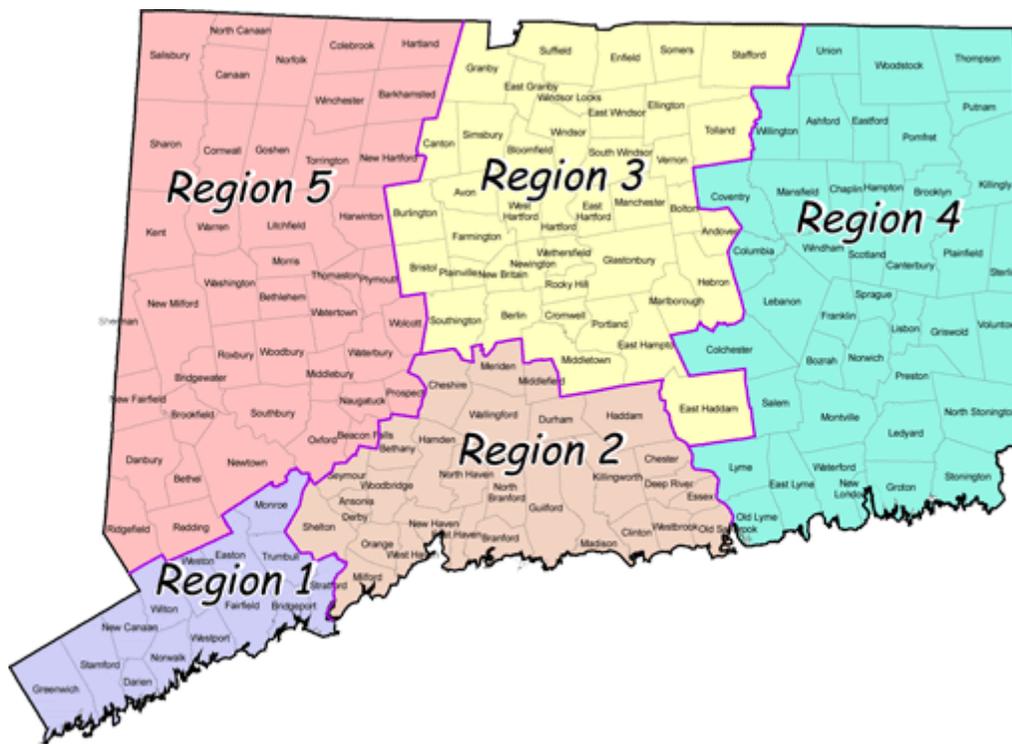
What is Region 2 ARES?

Now that you understand that ARES is a community service organization that is part of the ARRL, what is region 2?

Connecticut is broken down into 5 regions. This is done by the state of Connecticut and our state level served agency, the Department of Emergency Management / Homeland Security (DEMHS). Since their map has the state broken down into 5 regions, following their example makes a lot of sense.

We serve the same towns in each region that the State of Connecticut does. Each region has an Emergency Operations Center (EOC).

Below is a small map of CT and you can see Region 2 in tan in the lower center of the state.



A larger, printer friendly, full-page version of this map and region information is located in Appendix X: Region 2 Maps and Geography Information.

This appendix will also give you a top-level overview of “who’s-who” for this region.

The Region 2 EOC is located at the Connecticut Department of Public Safety building located at 1111 Country Club Road in Middletown.

Member Participation

Membership in ARES carries with it a significant personal responsibility. You need to find time to participate in drills and various exercises (both for our organization and for our served agencies). You also need to take time for annual training (though that requirement is very simple as referenced in our “Training Roadmap” later on in this manual).

When our members are not actively engaged in ARES activities, there is also the amount of work it takes to make sure your equipment and personal belongings are available at a moment’s notice. For this, you can get an idea in the various checklists available in this handbook.

General membership is expected to check into our regular weekly nets (net information on page 21 of this handbook), adhere to the “Training Roadmap”, attend at least three of the Region 2 ARES meetings, and two of our quarterly Section meetings.

Leadership Appointees are expected to check into our regular weekly Section nets, attend DEC monthly meetings and several other Regional meetings as to set an example for the rest of the membership. These leadership positions include:

- Section Emergency Coordinator (SEC)
- Assistant Section Emergency Coordinator (ASEC)
- District Emergency Coordinator (DEC)
- Assistant District Emergency Coordinator (ADEC)
- Emergency Coordinator (EC)
- Assistant Emergency Coordinator (AEC)
- Net Manager (NM)
- Assistant Net Manager (NM)

We cannot overemphasize the importance of your regular participation and its impact to the success of our organization. We are all volunteers who have freely accepted a commitment to community service. Your ARES training and participation in ARES events will make you a well-trained team player. Your knowledge and operating proficiency will allow us to better serve the State of Connecticut, Red Cross, Salvation Army and other served agencies.

The Amateurs Code

It is also extremely important to remember “The Amateurs Code” published by the ARRL in their handbook. Specifically, please note the part on “Balanced”:

The Radio Amateur is:

CONSIDERATE...never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE...with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED...radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC...station and skill always ready for service to country and community.

--The original Amateur's Code was written by Paul M. Segal, W9EEA, in 1928.

Activities (meetings and nets)

Meetings:

Regular membership meetings/training sessions are held 3 times per year. These session dates, times and training topics are discussed on our weekly nets, via email and the CT ARES Region 2 website (www.ctaresregion2.org).

We will make attempts to hold our three Regional meetings in a location that is central to the Region so as to not unfairly inconvenience any of our members who live on the fringes of the Region.

Nets:

Region 2 operates a weekly ARES Net on Monday evenings at 7:45 pm. Appendix I lists several Region 2 nets that are known to be active.

Drills and exercises

When an emergency situation arises, it is too late to begin thinking about how our organization will react. Because of this we train, plan and run routine exercises.

It is important to note that participation in public service events is also very important in this endeavor. Not only does this provide the obvious public service, but also it allows us to work together as a team and test our effectiveness.

Annual SET

Once a year, our section carries out a Simulated Emergency Test (SET). This event is usually carried out nationally, but not necessarily on the same day from section to section. This activity is used to show how members react to real situations and how effectively we, as an organization, handle such situations.

The test itself is rather straightforward. A scenario is developed (weather related, industrial accident, etc.), and as the drill progresses, new announcements and bulletins released and we as a team react accordingly. After this exercise (like any drill in which we are involved) we debrief ourselves on what worked, what didn't work, and what we can do to improve our effectiveness.

Served Agency Drills

These happen usually two or three times a year. We may be active during a local, state or federal exercise with any of our served agencies.

These are run in much the same manner as the annual SET.

Remember, if you are a CT ARES member, it is your responsibility to be knowledgeable and available to support the organization and its mission!

Memorandum of Understanding (MOU)

Understanding our Memoranda of Understanding (From the ARRL)

The premier justification for continued access to our piece of the spectrum pie is, and always will be, public service. A major part of our public service activity is conducted in the context of the League's formal agreements with "heavy hitters" of the emergency management community. These include, not in order of importance, the American Red Cross, the National Weather Service, the Federal Emergency Management Agency, the Association of Public-Safety Communications Officials-International, the National Communications System, the Salvation Army, and REACT. Let's take a brief look at each of these agencies, and our "method of operation" under each of our national-level formal agreements, a.k.a. Memoranda of Understanding (MOU).

First, however, a few basics: An MOU provides a framework for cooperation and coordination with agencies to which we, as radio amateurs, provide communication services. At the national level, this means Headquarters-to-Headquarters contact periodically, for exchanging news, views, information, and points of contact in the field. For example, ARRL staff attends the annual Red Cross partnership meeting, along with representatives from other agencies and organizations (from the government and non-government, private and commercial sectors) that have MOUs with the congressionally-chartered organization. The idea is to get to know one another on a face-to-face basis, so that when the detritus hits the fan, you know who to call and whom you can count on.

At the local level, an MOU serves two purposes. First, it's a door opener. A new ARES group is more likely to be heard and taken seriously by a local NWS office when accompanied by the agreement document signed by the head of the agency. The served agency says, in effect, we have examined this organization of radio amateurs and have found them to be trustworthy and able to render substantial and needed services for our field operations in times of emergency. The agency head is telling its field offices, "Go get 'em--they are good for us."

Secondly, once your foot is in the door, the provisions of the MOU document spell out the capabilities and organization of the servers (us), the organization and needs of the served agency (them), and the methods of operation. These are broad guidelines that lead to the establishment of a local memorandum of understanding or similar document that sets forth the detailed operational plans and policies to be subscribed to by both parties during drills, and actual events.

The most important step here is to ensure that both parties to the local agreement have a realistic assessment of the resources brought to the table by the servers, and the needs of the served. Fanciful expectations are the largest pitfalls leading to breaches of trust and a breakdown of relations, with each party going away unhappy and demoralized. Rifts develop and once in place, become recalcitrant. What's worse, is that the public, the "clientele" of both Amateur Radio and the agency, is not served. The public has the true need.

More information on ARRL MOU's is available on their website at the following link:

<http://www.arrl.org/served-agencies-and-partners>

The section that follows will show national MOU's. This does not include local or regional links. This list is by no means complete. There may be more organizations not listed on the ARRL or our list here.

There are links to the following organizations in which we have an MOU on the national level:

American Red Cross

National Weather Service

Department of Homeland Security -- Citizen Corps (FEMA)

Association of Public-Safety Communications Officials-International

National Communications System

National Association of Radio and Telecommunications Engineers, Inc.

Salvation Army

Society of Broadcast Engineers

Quarter Century Wireless Association, Inc.

Radio Emergency Associated Communication Teams

Civil Air Patrol (CAP)

Emergency Call-up and Activation Level Definitions

As mentioned earlier in the membership section, it is important to renew your membership so that we have the most current updated information to contact you as needed. If you have changed call signs, names (ladies), phone numbers, email addresses, mailing addresses, etc., please update your membership data on the membership database:

https://secure1.ema.arrl.org/qilan/ares/CT/CT_ARES_about

Staying updated allows you to stay informed about Region 2 and CT Section events, training opportunities and public service events. This allows us to reach people, as needed, during a real emergency.

Of course, we always monitor our regular repeater frequencies. However, when telephone and email service is still functional, we'll try to reach you by those means as well. You can check the current ARES Alert level by visiting:

<http://www.ctaresregion2.org> or <http://www.ctares.org> or <http://www.af1hs.com>

Once our organization is activated, you will want to check into a resource net and alert the net control station (NCS) that you are available.

Either by email, phone, or during nets, you will be notified of what our current alert status is at that time. The alert levels are listed below.

Our Alert Levels are:

Level 0 – Inactive: No known event likely to occur.

Level 1 – Alert: something might happen – a hurricane coming our way, etc.

Level 2 – Standby: will only occur if something happens (time to load the car, make sure everything is ready)

Level 3 – Deploy: will only occur if a served agency asks for help

Your EC and DEC are your points of contact as always. In case of emergency when phone service is disrupted, the following (in priority order) are the best ways to volunteer. Please remember that anyone who self dispatches will be turned away.

There are other leaders in our section that may be actively involved during a call-up. They would be the CT ARES Leadership Council or CALC. The members of this group are listed in Appendix VIII: The CT ARES Leadership Council.

The ways to check in when phone service is disrupted are:

First Choice - Your local ARES® 2-meter or other communications links. Local repeaters and net resources in the appendix section of this handbook.

Second Choice - The linked repeater system - The CT ARES® Resource and Planning Net

Third Choice - 3.965 MHz - CT Phone Net and Statewide HF Communications

Last Choice - E-mail to wa1sfh@optonline.net

Note that the e-mail address is truly a last choice. During non-emergencies please contact the appropriate ARES® leadership official using the information found at http://www.ctares.org/about_ctares.php.

Non-Member Participation

In the past, non ARES members might offer assistance during an emergency. Though the thought and consideration is appreciated, the time to actual deployment might be considerably delayed.

Since 9/11, we, as an organization, are required to have NIMS (National Incident Management System) training and compliance. This requirement was applied to all sectors of emergency service (police, fire, medical, Red Cross, Salvation Army, Tribal Nations that receive federal funding, etc.).

If you are not an ARES member that has had at least IS 100, IS 200, IS 700 and IS 800 training, you will have to take a “crash course” during the event. This is why we ask for membership and NIMS training before you are actually needed.

NIMS training is free and information is available in Appendix III - “Training Roadmap”.

NETC / FEMA course registration information is available in Appendix IV – NETC (FEMA) Online Virtual Campus How-To.

Additional Considerations

Considerable effort has been devoted to our call up and activation methods. Please keep in mind that our activation will be at the request of one of our served agencies.

Members can and should anticipate a call-up either by expecting certain weather conditions or listening to notices and bulletins on local ARES repeaters.

Remember, we volunteer our communications skills and equipment as needed by our served agencies when normal means of communication have failed or when volume on standard channels of communication is unusually high or burdened.

Net Protocol and Effective Communications

What is effective communications?

Effective communications occurs when one station transmits a message to a receiving station clearly and concisely. Simple statement, but takes practice.

It is important to note that unlike normal “ragchewing” or repeater conversations – our operations carry considerable responsibility. Our ability to carry out effective communications can quite literally be a matter of life or death.

Normal methods of conversation via radio might not be the most effective, so please take advantage of all training opportunities and public service events. These are great practice and allow us to practice effective communications, whether we use voice, CW (Morse code), digital modes, etc.

The following techniques will allow us to provide acceptable emergency communications. We ask that all volunteer operators adhere to these standards as closely as possible while providing communications support either during an emergency or during a public service event.

Remember, public service events should be treated as seriously as emergencies. These are our greatest training opportunities to function as an organization.

Net Control

The net control station (NCS) is like a conductor of a symphony. He controls who and when other stations are heard during a net. The NCS will act as a kind of “traffic cop” for all messages according to their importance.

The NCS will also maintain a log of all traffic, times, stations, etc. It is important to keep this written information for immediate reference and after an exercise or emergency during debriefing. All NCS should know what their duties are and whom they report to. If there is any doubt, please contact any ARES leadership for direction.

If you have a priority message, make it known. If you have a routine message, please DO NOT check in with a priority or emergency message. You can seriously jeopardize the safety and well being of others with true emergency messages.

Tactical Call Signs:

Tactical call signs are sometimes used to indicate a station location, responsibility, function, etc. Some examples may include:

- Region 2 EOC
- New Haven Red Cross
- Milford, Shelter 3

What is important to note is that using these on the air DOES NOT TAKE THE PLACE OF YOUR NORMAL FCC ID OBLIGATIONS. As required by the FCC, you still must identify your station, by using your call sign, every 10 minutes or at the end of a conversation.

Listen Before Transmitting:

It is vital that you always listen before transmitting, even if you have an emergency. If you are on the same repeater as the person transmitting, your message will most likely not be heard if you transmit at the same time as another station. Likewise, if you have a routine message, you can literally “walk over” another emergency message and seriously hinder effective communication.

If there is a net in progress, stand by and wait for routine check-ins. Do not interrupt the flow of the net until check-ins are queried. Unless, of course, you have an emergency.

If you haven't heard any messages on the frequency for a while, check your rig to see if you have a “stuck mike” or have moved off frequency, or have a dead battery.

Linked Repeater Nets:

Repeaters that are linked require a slightly different style of operating due to the inherent delays caused by the switching required to link the repeaters for each transmission:

The PTT button means **Push, (pause), Then Talk**

When you begin your transmission:

- Push the Mic. button
- Wait (pause with a silent “Mississippi One”)
- Talk (now say what you want to say, without letting go of the PTT button)
- Release the PTT button ONLY when finished speaking.

Failure to adhere to this procedure will do two things:

- 1) Drop the first part of your transmission.
- 2) Cause confusion and delay.

The following section on "Break Tags" will also help during net operations.

Break Tags

When net communication gets heavy, someone may have a quick solution to a problem that is taking up too much valuable airtime for discussion, but can't break into the net to share it. The use of "Break Tags" is the way to deal with such a scenario.

There are currently seven one-word Break Tags. They are: "answer," "question," "info," "priority," "medical," "emergency" and your call sign by itself. Most of these tags have been used with great success in large public/emergency services nets. Here is how they work: Instead of saying "break" between transmissions during a directed net, the operator uses the word specified as a Break Tag with a call sign. They are to be used only when the operator's traffic will be appreciated by net control and results in more efficient communication. They are to be used wisely, as net control is directed to stop and query the breaking station. The message that follows a break should be as short as possible. Make sure you know what you are going to say before using a break tag; some people can compose the transmission in their head, others will need to write the information down.

Here are the definitions and how they are used:

"Answer":

To be used when you have the definitive answer to a question currently being discussed on the air.

"Question":

To be used when the answer of a question can't wait; for example, when the mayor is standing next to you and requesting you to get information using your radio.

"Info":

To be used when information needs to be transmitted rapidly but is not related to what is being said on the air; for example, if an event that net control needs to know about is going to happen in the next few seconds or if waiting for the end of an exchange will negate the value of the information.

"Priority":

To be used to report an important but non-life threatening situation such as a fender-bender that just happened.

"Medical":

To be used to report a minor medical incident that affects the operator in some way; for example, having to leave his/her post for a few minutes to walk someone with a minor cut over to a med tent.

"Emergency":

Only to be used to report an ongoing life or property threatening or damaging incident.

Your Call Sign:

Traditionally used as a break tag, but when used alone does not give the net control station the same amount of information that the other six break tags do.

Using "Break Tags" takes little training. Its use is contagious and comes very naturally. Other ACES/ARES groups around the country are using them with good results.

ITU Phonetics:

The phonetic alphabet was developed by the International Telecommunications Union (ITU). This alphabet should always be used whenever there is a need to spell words over the air. These words have been chosen as easily recognizable even when pronounced with various accents or under poor reception conditions. It is far too common for amateur operators to use other phrases or “cute phonetics” during routine operation. This is fine for normal “rag chewing” but completely unacceptable during net operations or when providing public service. These are international phonetics and are easily recognized by operators who aren’t proficient in the English language.

The ITU Phonetic Alphabet is located in Appendix V.

Weekly and Emergency Nets:

Please check into our various local nets. Several nets are held on a weekly basis. Checking into these nets will allow you to stay aware of upcoming events, frequency changes, public service announcements, etc. Net frequencies are located in the following Appendixes:

Appendix I – Region 2 Repeaters

Appendix II – Simplex Frequencies

Appendix VI: Weekly and Emergency Net Information:

Net scripts can be located at:

Appendix VII: Net Scripts

Once again, there is no formally established Region 2 ARES Net at this time.

NTS – National Traffic System

The National Traffic System plan is a means for systematizing amateur traffic handling facilities by making a structure available for an integrated traffic facility designed to achieve the utmost in two principal objectives: rapid movement of traffic from origin to destination, and training amateur operators to handle written traffic and participate in directed nets.

These two objectives, which sometimes conflict with each other, are the underlying foundations of the National Traffic System.

NTS operates daily, even continuously with the advent of the advanced digital links of today. The personnel consists of operators who participate for one or two periods a week, and some who are active daily. The National Traffic System is an organized effort to handle traffic in accordance with a plan which is easily understood, is basically sound, and which employs modern methods of network traffic handling in general acceptance today.

NTS is not intended as a deterrent or competition for the many independently-organized traffic networks. When necessitated by overload or lack of outlet for traffic, the facilities of such networks can function as alternate traffic routings where this is indicated in the best interest of efficient message relay and/or delivery.

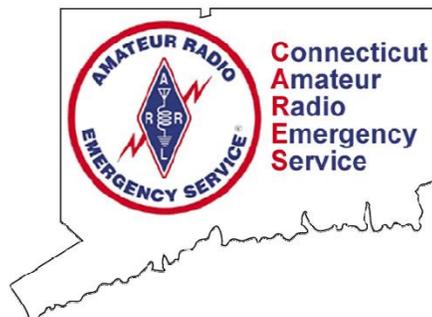
One of the most important features of NTS is the "system concept." No NTS net is an independent entity which can conduct its activities without concern for or consideration of other NTS nets. Each net performs its function and only its function in the overall organization. To whatever extent nets fail to perform their functions or perform functions intended for other nets, to this extent is the overall system adversely affected.

Nets may sometimes find it necessary to adopt temporary expedients to ensure the movement of traffic, and this is considered improper operation only when no attempt is made to return to the normal schedule. Nevertheless, improper operation of any NTS net is the concern of all NTS nets, and every effort should be made to assist in returning any non-functioning or improperly functioning net to its normal operation.

Mode:

The National Traffic System is not dedicated specifically to any mode or to any type of emission, nor to the exclusion of any of them, but to the use of the best mode for whatever purpose is involved. The aim is to handle formal written traffic systematically, by whatever mode best suits the purpose at hand. Whether voice, CW, RTTY, AMTOR, packet or other digital mode is used for any specific purpose is up to the Net Manager or Managers concerned and the dictates of logic. There is only one National Traffic System, not separate systems for each mode. Modes used should be in accordance with their respective merits, personnel availabilities and liaison practicalities. Whatever mode or modes are used, we all work together in a single and thoroughly integrated National Traffic System.

Appendix I – Region 2 Repeaters



CT ARES Region 2 Net Directory

Region 2 Traffic, Training, & Emergency Nets

Function	Type **	Primary	Secondary	Time
Region 2 ARES Ready Net	◆	147.505 -1MHz, PL 77.0 (West Haven)	145.290- PL 110.9 (Killingworth)	Mon., 7:45 PM
SPARC Net		147.505 -1MHz, PL 77.0 (West Haven)	224.500-, PL 77.0 (West Haven)	Weds., 8:00 PM
"		"	442.500+, DCS 073/PL 77.0 (Woodbridge)	"
SPARC Simplex Net		"	Listen only on 442.500 Rptr.	Thurs., 8:00 PM
Meriden Amateur Radio Club (MARC) HF-SSB Net		28.375 USB (Wallingford)		Tues., 8:00 PM
Meriden Amateur Radio Club (MARC) VHF-FM Net		147.360- PL 162.2 (Wallingford)		Tues., 7:00 PM
Meriden Amateur Radio Club (MARC) VHF-SSB Net		50.175 USB (Wallingford)		Mon., 8:00 PM

◆ This net is part of the CT ARES group.

CT ARES Region 2 Repeaters

<u>City</u>	<u>Frequency</u>	<u>PL</u>	<u>Call</u>	<u>Notes</u>
Ansonia	145.190-	77.0	WK1M	
Ansonia	146.985-	141.3	W1VAR	
Ansonia	444.350+	DMR/CC2	K1EIR	
Ansonia	444.850+	100.0/100.0	AC1KV	6
Branford	449.325-	DMR/CC1	N1HUI	1
Branford	927.8125-	D311	N1HUI	
Durham	444.550+	D-STAR	KB1UHS-B	
Durham	927.8375-	103.5/141.3	KB1MMR	1
East Haven	147.255+	110.9	AA1VE	
East Haven	449.825-	110.9	KA1MJ	1
Guilford	53.750-	110.9	NI1U	2
Guilford	441.2625+	DMR/CC1	W1SP	
Hamden	444.450+	100.0/100.0	WA1MIK	6
Hamden	927.4125-	D311/100.0	WA1MIK	
Killingworth	145.290-	110.9/100.0	W1BCG	
Killingworth	146.415, +1MHz	NAC 141/141.3	KB1MMR	3
Meriden	145.490-	D-STAR	W1ECV-C	
Meriden	224.800-	77.0	K1HSN	
Meriden	444.200+	77.0	KB1AEV	
Meriden	444.250+	D-STAR	W1ECV-B	
Meriden	448.000-	192.8/162.2	W1XOJ	
Middlefield/Durham	446.925-	77.0	KB1MMR	4
Milford	146.925-	67.0	KB1CBD	
Milford	147.225+	C4FM/77.0	KA1FAI	
Milford	223.880-	-	N1JKA	
Milford	443.550+	77.0	N1LUF	
Milford	446.600-	100.0/100.0	KA1FAI	1
New Haven	224.080-	88.5	KB1CDI	
New Haven	441.4625-	DMR/CC1	KB1TTN	
North Branford	449.475-	DMR/CC1	NI1U	
Seymour	442.900+	DMR/CC1	KA1HCX	
Shelton	446.975-	77.0	W1VAR	
Wallingford	147.360+	162.2	W1KKF	
Wallingford	447.925-	DMR/CC1	K1IIG	
West Haven	146.610-	110.9	W1GB	

<u>City</u>	<u>Frequency</u>	<u>PL</u>	<u>Call</u>	<u>Notes</u>
West Haven	224.500-	77.0	K1SOX	
West Haven	449.925-	DMR/CC1	KB1TTN	
Westbrook	146.775-	110.9	W1BCG	1
Westbrook	444.000+	D-STAR	W1BCG-B	
Westbrook	445.7375-	DMR/CC2	WB1EOC	
Woodbridge	147.505, -1MHz	77.0	K1SOX	
Woodbridge	442.500+	DCS 073/77.0	W1WPD	5

Note 1: Local service only

Note 2: Receiver located in Hamden

Note 3: Has remote bases for 2-meters and 440

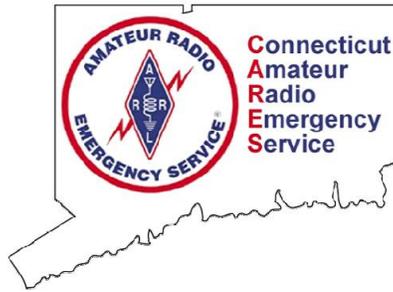
Note 4: Remote base, switchable TX sites, remote RXs in Middlefield and Durham

Note 5: Has remote bases for 2-meters and 440, provides NWR SAME Alerts

Note 6: Closed repeater

The repeaters listed above represent those clubs / owners that graciously give permission to Region 2 ARES for the use of their repeaters for various nets, events and training sessions.

Appendix II – Simplex Frequencies



CT ARES

AREA 2

Simplex Frequency Chart

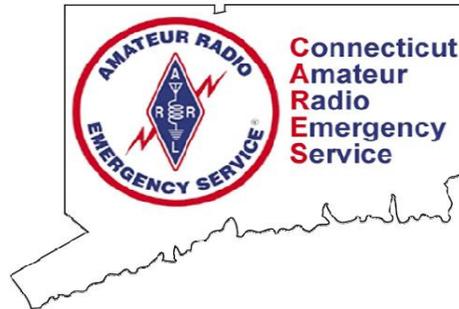
Region 2 Simplex Frequencies by Town
May be used for local simplex communications

#	TOWNS	FREQ.	TAC CALL
0	REGION 2	144.490	ALPHA 2
1	Ansonia	147.540	HOTEL 2
2	Bethany	144.450	JULIETTE 2
3	Branford	147.525	GOLF 2
4	Cheshire	146.580	FOXTROT 2
5	Chester	146.550	DELTA 2
6	Clinton	144.450	JULIETTE 2
7	Deep River	146.580	FOXTROT 2
8	Derby	147.525	GOLF 2
9	Durham	145.550	BRAVO 2
10	East Haven	147.570	INDIA 2
11	Essex	146.565	ECHO 2
12	Guilford	144.450	JULIETTE 2
13	Haddam	146.535	CHARLIE 2
14	Hamden	146.550	DELTA 2
15	Killingworth	147.540	HOTEL 2
16	Madison	147.570	INDIA 2
17	Meriden	146.535	CHARLIE 2
18	Middlefield	147.570	INDIA 2
19	Milford	146.535	CHARLIE 2
20	New Haven	145.550	BRAVO 2
21	North Branford	146.565	ECHO 2
22	North Haven	144.465	KILO 2
23	Old Saybrook	145.550	BRAVO 2
24	Orange	146.565	ECHO 2
25	Seymour	147.570	INDIA 2
26	Shelton	146.550	DELTA 2
27	Wallingford	147.540	HOTEL 2
28	West Haven	146.580	FOXTROT 2
29	Westbrook	147.525	GOLF 2
30	Woodbridge	144.465	KILO 2
31	Alt #1	145.655	YANKEE 2
32	Alt #2	145.595	ZULU 2

SIMPLEX FREQUENCY CHART (by TAC Call):

ALPHA 2	144.490 - Region 2
BRAVO 2	145.550 - Durham, Old Saybrook, New Haven
CHARLIE 2	146.535 - Haddam, Meriden, Milford
DELTA 2	146.550 - Chester, Hamden, Shelton
ECHO 2	146.565 - Essex, North Branford, Orange
FOXTROT 2	146.580 - Cheshire, Deep River, West Haven
GULF 2	147.525 - Branford, Derby, Westbrook
HOTEL 2	147.540 - Ansonia, Killingworth, Wallingford
INDIA 2	147.570 - East Haven, Madison, Middlefield, Seymour
JULIETTE 2	144.450 - Bethany, Clinton, Guilford
KILO 2	144.465 - North Haven, Woodbridge
YANKEE 2	145.655 – Alternate #1 – for interference problems
ZULU 2	145.595 – Alternate #2 – for interference problems

Appendix III – CT ARES Training Roadmap (Source: CT Section ARES)



CT ARES Training Plan

This is the Connecticut ARES Training Roadmap

There are three major areas:

1. General ARES Training
2. Training to help us work with our served agencies
3. Connecticut ARES Specific Training

Information on registering for these courses, course format, etc. is included in the Course Description section following the roadmap. (This roadmap is being shared with surrounding Sections so that they will know what we are doing.)

Training Roadmap

ARRL General ARES Training	FEMA/DHS/Red Cross Training	CT ARES Specific Training
<p>Amateur Radio Emergency Communications (EC-001) Prerequisites: ICS-100 and IS-700 For more info or registration: http://www.arrl.org/online-course-registration</p>	<p>Red Cross Introduction to Disaster Strongly recommended for all members. For Red Cross training info: http://www.ctredcross.org/</p>	<p>CT ARES Symposiums - strongly recommended for all members.</p>
<p>Public Service and Emergency Communications Management for Radio Amateurs (EC-016) Prerequisites: EC-001 and Skywarn For more info or registration: https://www.arrl.org/ec-016-course</p>	<p>DHS IS-700 Introduction to National Incident Management System Strongly recommended for all members http://training.fema.gov/EMIWeb/IS/IS700a.asp</p>	
	<p>DHS IS-22 Are You Ready? Recommended for all members. http://training.fema.gov/EMIWeb/IS/is22.asp</p>	

Course Descriptions

In terms of General ARES training, the ARRL offers the following Courses:

- Introduction to Amateur Radio Emergency Communications ([EC-001](#)) - A basic course to raise awareness and provide additional knowledge and tools for any emergency communications volunteer. This course has six sections with 29 lesson units and is expected to take approximately 45 hours to complete over an 9-week period. This course is highly recommended by CT ARES for all ARES members. The completion of FEMA courses [ICS-100.b](#) and [IS-700.a](#) are required before enrolling for this course.
- Public Service and Emergency Communications Management for Radio Amateurs ([EC-016](#)) – This course is designed to train licensed amateur radio operators who will be in leadership and managerial roles organizing other volunteers to support public service activities and communication emergencies. It is a self-paced course and requires the completion of EC-100 (above), Skywarn training, [IS-100.b](#), [IS-200.b](#), [IS-700.a](#) and [IS-800.b](#). Additional courses, such as [IS-120.a](#), [IS-230.d](#), [IS-235.c](#), [IS-240.b](#), [IS-241.b](#), [IS-242.b](#) and [IS-244.b](#), will be required during the completion of EC-016. Also recommended (but not required), are [IS-1.a](#) and [IS-288.a](#).

All of the above courses are Internet-based, self-paced and consist of learning experiences on-line, on the air, and working over the Internet via e-mail with a mentor.

In terms of training to help us work with our served agencies:

DHS IS-700 National Incident Management System (NIMS), an Introduction

<http://training.fema.gov/is/courseoverview.aspx?code=IS-700.a>

DHS Description: On February 28, 2003, President Bush issued Homeland Security Presidential Directive-5. HSPD-5 directed the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS). NIMS provides a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents.

The DHS IS-700 Course introduces NIMS and takes approximately three hours to complete. It explains the purpose, principles, key components and benefits of NIMS. The course also contains “Planning Activity” screens giving you an opportunity to complete some planning tasks during this course. The planning activity screens are printable so that you can use them after you complete the course.

*AB1CR’s Comments: This course is **vital** to understanding how FEMA/DHS plans to operate at **TOPOFF** and other times. It provides a very slim description of ICS, which is a vital part of NIMS, but NIMS is more than ICS. I think this course should be **highly recommended** for **all ARES leaders**, and **required** for **CALC** and **DECs**. This course should be a high priority for any ARES member who is interested in understanding FEMA/DHS disaster management. If a person is going to take IS-100 and IS-200 they should take them before IS-700.*

*FINAL NOTE: IS-700 NIMS is the most important of all of these courses for any ARES member, but **leaders** should take **IS-100** and **IS-200** first.*

ICSSS and ICSTUT are some short self-study courses on ICS but are fire-based and do not readily apply to what we do, or our served agency needs.

DHS IS-22 Are You Ready?: An In-depth Guide to Citizen Preparedness

DHS Description: This guide has been prepared for direct dissemination to the general public and is based on the most reliable hazard awareness and emergency education information available at the time of publication, including advances in scientific knowledge, more accurate technical language and the latest physical research on what happens in disasters.

*AB1CR’s Comments: Every adult or high-school student in America should be encouraged to take this course. It does not require using the on-line system so no technological expertise is required. While I feel it is important, as far as **ARES** I think it is **optional**.*

DHS IS-100 Incident Command System, Basic

<http://www.training.fema.gov/is/courseoverview.aspx?code=IS-100.b>

DHS Description: This course is designed to introduce the principles, common terminology and position responsibilities when responding to an event using the Incident Command System.

*AB1CR’s Comments: This course is **vital** to understanding ICS and should be **highly recommended** for **all ARES leaders**, and **required** for **CALC** and **DECs**. The average ARES member could benefit from it, but if they have only a small amount of time to put into training they should take IS-700.*

DHS IS-200 Incident Command System, Basic

<http://www.training.fema.gov/is/courseoverview.aspx?code=IS-200.b>

DHS Description: This course has been developed to compliment the IS-100 course for the Federal disaster response workforce, and to take the student's education to the I-200 level.

AB1CR's Comments: Same as IS-100. This provides a great more detailed explanation that the IS-100 course.

DHS IS-800 National Response Plan, An Introduction

<http://www.training.fema.gov/is/courseoverview.aspx?code=IS-800.b>

DHS Description: The NRP provides a framework to ensure that we can all work together when our Nation is threatened.

K1DAV's Comments: This course completes what I call the "alphabet soup" courses which are IS-100, IS-200 & IS-700.

These give you a good insight into the Federal mindset of how command is handled in situations where multiple agencies respond.

Red Cross Introduction to Disaster:

This is the key course to take before the American Red Cross will permit you to take their other courses. We will try to offer this in one ARES Symposium each year.

Red Cross Disaster Assessment:

Available at your local Red Cross Chapter. Any questions, contact your local American Red Cross Chapter, or check the website: <http://www.redcross.org/local/ct/>

NOAA Skywarn Spotter Sessions:

Information on Skywarn Spotter Sessions can be found at <http://www.ctskywarn.org>. Both the Basic and Advanced Spotter Sessions are suggested for all CT ARES Members.

CTARES Specific Training:

In terms of training that is specific to CT ARES at times we offer an ARES Symposium and special sessions are often offered at ham fests. Those who subscribe to the CT ARES Discussion e-mail list will be informed of all of these training opportunities. The CT ARES Symposium usually covers the following topics, which are subject to change:

- Go Kits and Deployment Preparation
- Directed and Tactical Nets
- Formal NTS Message Handling
- Red Cross Introduction to Disaster
- National Incident Management System (NIMS) and how ARES fits into the Incident Command System structure of NIMS

Appendix IV: ITU Phonetic Alphabet

ITU Phonetic Alphabet:

Word list adopted by the International Telecommunications Union

A--Alfa
B--Bravo
C--Charlie
D--Delta
E--Echo
F--Foxtrot
G--Golf
H--Hotel
I--India
J--Juliet
K--Kilo
L--Lima
M--Mike
N--November
O--Oscar
P--Papa
Q--Quebec
R--Romeo
S--Sierra
T--Tango
U--Uniform
V--Victor
W--Whiskey
X--X-ray
Y--Yankee
Z--Zulu

Appendix V: Weekly and Emergency Net Information:

Region 2 operates a weekly ARES Net on Mondays at 7:45 pm. Appendix I lists several Region 2 nets that are known to be active.

Appendix VI: Net Scripts:

Suggested Region 2 Net Script

Suggested Region 2 Emergency Net

**** OPENING ****

Is this frequency in Use? (Pause. If nothing is heard, proceed.)

Does anyone need to make a call before we start tonight's Region 2 emergency net?

Calling the Region 2 ARES net, Calling the Region 2 ARES net

This is (your callsign) and my name is (), net control station for this session of the Region 2 Emergency Net. This net meets every (day of week) evening at (local time), on the () Repeater System, for the purpose of passing ARES related bulletins and announcements, informal training and encouraging all amateurs to participate in emergency communications. This is a directed net and check-ins are welcome from anyone anywhere. All communications will be directed by Net Control. Again, this is (callsign), net control, and my name is ().

Do we have any priority or emergency traffic? (Pause)

Any other traffic?

When all traffic has been listed and handled, make the following statement:

I'll now take all check-ins. Please give your call sign phonetically, your location, name, then wait to be recognized. I'll take several check-ins at a time. If I miss you or have your call wrong, please check in again so I get you correctly in the log.

(After taking all comments and late check-ins, read the following)

***** CLOSING *****

Net Control Stations are needed. If you are willing and able to take this net for one week at a time, please let me know.

Right now, a volunteer is needed for _____(any upcoming week).

Call signs please.

This concludes tonight's session of the Region 2 Emergency Net. We look forward to hearing from you again next week, same time, same place. Please pass the word that this net is here for the good of everyone and our communities. In the case of an emergency, please tune to this frequency for any instructions. Thanks to one and all who participated. Thanks also to the control operator of the () Repeater System for the use of this repeater and any additional links.

This is (call sign) returning the () Repeater System to regular Amateur use.

Appendix VII: The CT ARES Leadership Council

Current members of the CT ARES Leadership Council (CALC) are:

Wayne Gronlund, N1CLV - SEC leader of the team, and overall operational coordination; n1clv@mac.net

Rod Lane, N1FNE – Assistant SEC; n1fne@arrl.net

Ron Pariseau, K1VSC – Assistant SEC; k1vsc@yahoo.com

Bill Covey, W1GTT – Assistant SEC; w1gtt@aol.com

Art Fregeau, AF1HS – Assistant SEC; af1hs@arrl.net

Brian Fernandez, K1BRF– Assistant SEC; comlink8@gmail.com

Anne West, K1STM – Section Traffic Manager (STM); ctdaffodill@snet.net

Douglas Sharafanowich, WA1SFH – Section Youth Coordinator (SYC); wa1sfh@optonline.net

Steve Simons, W1SMS – Technical Coordinator (TC); ssimons@manitousys.com

DEC (Region 1) Paul Lourd, WB2JVB; wb2jvb@arrl.net

DEC (Region 2) Douglas Sharafanowich, WA1SFH; wa1sfh@optonline.net

DEC (Region 3) George Lillenstein, AB1GL; ab1gl@arrl.net

DEC (Region 4) Reed Gustafson, K1EMD; nrgustafson@comcast.net

DEC (Region 5) Mike Walters, W8ZY; w8zy@hotmail.com

DEC SKYWARN - Steve Williams; k1sjw@arrl.net

DEC Digital Communications Coordinator: *temporarily vacant*

Official Emergency Stations assigned to management responsibilities may be included at the discretion of the SEC. These appointees may also be included at ARES leadership meetings at the request of the SEC.

The Section Manager is an ex officio member of the CALC; Elizabeth Doane, SM k1eic@arrl.org.

Appendix VIII: NTS Net Reference Information

Schedule of NTS Nets					
NTS Nets	Day(s)	Time (EST)	Freq/Offset/PL	NM	QTH
CT Phone Net (CPN)	M-Sat	1800	3.973 MHz/None/None	WX1T	New Fairfield
CT Phone Net (CPN)	Sun	1000	3.965 MHz/None/None	WX1T	New Fairfield
CT Net (CN)	Sa/Su only	1900	3.533 MHz/None/None	WA1GGN	West Haven
Western CT Traffic Net (WESCONN)	Daily	2030	147.180/+600/141.3	KB1NMO	Prospect
"	Daily	2030	147.120/+600/141.3	KB1NMO	Danbury
"	Daily	2030	145.410/-600/141.3	KB1NMO	Vernon
Eastern CT Traffic Net (ECTN)	Daily	2100	146.730/-600/156.7	W1MCT	Norwich
Nutmeg VHF Traffic Net (NVTN)	M, Tu, Th-Sun	2130	146.685/-600/141.3	KB1ZBH	Bristol
"	Wed	2130	147.090/+600/110.9	KB1RGQ	Glastonbury

Contact the Section NTS Traffic Manager, Anne West, K1STM to volunteer as a Net Control operator or backup.

In an Emergency the Section Manager, SEC, or DEC's may activate these nets at other times/days. If no NTS traffic is being moved the Nets will close and reopen – usually on the hour or every two hours for the duration.

These nets are designed so our NTS operators work from their homes. They take messages from field personnel and hold them for the destination station or relay them via other nets or packet.

Emergency Operations Centers – EOC's – should monitor these nets when opened:

- The State's Administrative net
- The Region Administrative net
- Local shelter frequencies
- The ARES Tactical net
- The ARES Resources net
- The NTS local net at the scheduled time
- The NTS state net at the scheduled time
- Packet for bulletins and traffic held for the EOC

Smaller or less-equipped EOC's should monitor at least the first three.

The following pages in this appendix will have general NTS operating aids as well as a blank copy of an NTS form. We advise that you either purchase the pads from the ARRL or print plenty of copies of the blank form for your plan.

Some amateurs keep a binder and logbook together just for passing traffic.

Every formal radiogram message originated and handled should contain the following component parts in the order given:

I. Preamble

- a. Number (begin with 1 each month or year)
- b. Precedence (R, W, P or EMERGENCY)
- c. Handling Instructions (optional, see text)
- d. Station of Origin (first amateur handler)
- e. Check (number of words/groups in text only)
- f. Place of Origin (not necessarily location of station of origin.)
- g. Time Filed (optional with originating station)
- h. Date (must agree with date of time filed)

II. Address

(as complete as possible, include zip code and telephone number)

III. Text

(limit to 25 words or less, if possible)

IV. Signature

CW: The prosign **AA** separates the parts of the address, **BT** separates the address from the text and the text from the signature. **AR** marks end of message; this is followed by B if there is another message to follow, by N if this is the only or last message. It is customary to copy the preamble, parts of the address, text and signature on separate lines.

RTTY: Same as CW procedure above, except

- (1) use extra space between parts of address, instead of **AA**
- (2) omit CW procedure sign **BT** to separate text from address and signature, using line spaces instead;
- (3) add a CFM line under the signature, consisting of all names, numerals and unusual words in the message in the order transmitted.

PACKET/AMTOR BBS: Same format as shown in the CW message example above, except that the **AA** and **AR** prosigns may be omitted. Most Amtor and packet BBS software in use today allows formal message traffic to be sent with the "ST" command. Always avoid the use of spectrum-wasting multiple line feeds and indentations.

PHONE: Use prowords instead of prosigns, but it is not necessary to name each part of the message as you send it. For example, the above message would be sent on phone as follows: "Number one routine HX Golf W1AW eight Newington Connecticut one eight three zero zulu july one Donald Smith Figures one six four East Sixth Avenue North River City Missouri zero zero seven eight nine Telephone seven three three four nine six eight Break Happy birthday X-ray see you soon X-ray love Break Diana End of Message Over. "End of Message" is followed by "More" if there is another message to follow, "No More" if it is the only or last message. Speak clearly using VOX (or pause frequently on push-to-talk) so that the receiving station can get fills. Spell phonetically all difficult or unusual words--do not spell out common words. Do not use CW abbreviations or Q-signals in phone traffic handling.

Precedences

The precedence will follow the message number. For example, on cw 207R or 207 EMERGENCY. On phone, "Two Zero Seven, Routine (or 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 and other digital modes this designation will always be spelled out. When in doubt, do not use it.

PRIORITY--Important messages having a specific time limit. Official messages not covered in the Emergency category. Press dispatches and other emergency-related traffic not of the utmost urgency. Notifications of death or injury in a disaster area, personal or official. Use the abbreviation P on CW.

WELFARE--A message that is either a) an inquiry as to the health and welfare of an individual in the disaster area b) an advisory or reply from the disaster area that indicates all is well should carry this precedence, which is abbreviated W on CW. These messages are handled after Emergency and Priority traffic but before Routine.

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

Handling Instructions (Optional)

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

HXB--(Followed by number) Cancel message if not delivered within....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....(date).

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

For further information on traffic handling, consult the Public Service Communications Manual or the ARRL Operating Manual, both published by ARRL.

ARRL QN Signals For CW Net Use

- QNA* Answer in prearranged order.
- QNB* Act as relay Between _____ and _____
- QNC All net stations Copy. I have a message for all net stations.
- QND* Net is Directed (controlled by net control station).
- QNE* Entire net stand by.
- QNF Net is Free (not controlled).
- QNG Take over as net control station.
- QNH Your net frequency is High.
- QNI Net stations report in.* I am reporting into the net. (Follow with a list or traffic or QRU).
- QNJ Can you copy me? Can you copy _____?
- QNK* Transmit message for _____ to _____
- QNL Your net frequency is Low.
- QNM* You are QRming the net. Stand by.
- QNN Net control station is _____ What station has net control?
- QNO Station is leaving the net.
- QNP Unable to copy you. Unable to copy _____
- QNQ* Move frequency to _____ and wait for _____ to finish handling traffic. Then send him traffic for _____
- QNR Answer _____ and Receive traffic.
- QNS* Following Stations are in the net. *(Follow with list.) Request list of stations in the net.
- QNT I request permission to leave the net for _____ minutes.
- QNU* The net has traffic for you. Stand by.
- QNV* Establish contact with _____ on this frequency. If successful, move to _____ and send him traffic for _____
- QNW How do I route messages for _____?
- QNX You are excused from the net.* Request to be excused from the net.
- QNY* Shift to another frequency (or to _____ kHz) to clear traffic with _____
- QNZ Zero beat your signal with mine.

* For use only by the Net Control Station.

Notes on Use of QN Signals

The QN signals listed above are special ARRL signals for use in amateur CW nets only. They are not for use in casual amateur conversation. Other meanings that may be used in other services do not apply. Do not use QN signals on phone nets. Say it with words. QN signals need not be followed by a question mark, even though the meaning may be interrogatory.

International Q Signals

A Q signal followed by a ? asks a question. A Q signal without the ? answers the question affirmatively, unless otherwise indicated.

QRA	What is the name of your station?
QRG	What's my exact frequency?
QRH	Does my frequency vary?
QRI	How is my tone? (1-3)
QRK	What is my signal intelligibility? (1-5)
QRL	Are you busy?
QRM	Is my transmission being interfered with?
QRN	Are you troubled by static?
QRO	Shall I increase transmitter power?
QRP	Shall I decrease transmitter power?
QRQ	Shall I send faster?
QRS	Shall I send slower?
QRT	Shall I stop sending?
QRU	Have you anything for me? (Answer in negative)
QRV	Are you ready?
QRW	Shall I tell _____ you're calling him?
QRX	When will you call again?
QRZ	Who is calling me?
QSA	What is my signal strength? (1-5)
QSB	Are my signals fading?
QSD	Is my keying defective?
QSG	Shall I send _____ messages at a time?
QSK	Can you work break-in?
QSL	Can you acknowledge receipt?
QSM	Shall I repeat the last message sent?
QSO	Can you communicate with _____ direct?
QSP	Will you relay to _____?
QSV	Shall I send a series of V's?
QSW	Will you transmit on _____?
QSX	Will you listen for _____ on _____?
QSY	Shall I change frequency?
QSZ	Shall I send each word/group more than once? (Answer, send twice or _____)
QTA	Shall I cancel number _____?
QTB	Do you agree with my word count? (Answer negative)
QTC	How many messages have you to send?
QTH	What is your location?
QTR	What is your time?
QTV	Shall I stand guard for you _____?
QTX	Will you keep your station open for further communication with me?
QUA	Have you news of _____?

Abbreviations, Prosigns, Prowords

CW PHONE (meaning or purpose)

- AA** (Separation between parts of address or signature.)
- AA All after (use to get fills).
- AB An before (used to get fills).
- ADEE Addressee (name of person to whom message addressed).
- ADR Address (second part of message).
- AR End of message (end of record copy).
- ARL (Used with "check," indicates use of ARRL numbered message in text).
- AS** Stand by; wait.
- B More (another message to follow).
- BK Break; break me; break-in (interrupt transmission on cw. Quick check on phone).
- BT** Separation (break) between address and text; between text and signature.
- C Correct; yes.
- CFM Confirm. (Check me on this).
- CK Check.
- DE** From; this is (preceding identification).
- HH** (Error in sending. Transmission continues with last word correctly sent.)
- HX (Handling instructions. Optional part of preamble.) Initial(s). Single letter(s) to follow.
- IMI** Repeat; I say again. (Difficult or unusual words or groups.)
- K Go ahead; over; reply expected. (Invitation to transmit.)
- N Negative, incorrect; no more. (No more messages to follow.)
- NR Number. (Message follows.)
- PBL Preamble (first part of message)
- N/A Read back. (Repeat as received.)
- R Roger; point. (Received; decimal point.)
- SIG** Signed; signature (last part of message.)
- SK** Out; clear (end of communications, no reply expected.)
- TU Thank you.
- WA Word after (used to get fills.)
- WB Word before (used to get fills.)
- N/A Speak slower.
- N/A Speak faster.



**THE AMERICAN RADIO RELAY LEAGUE
RADIOGRAM
VIA AMATEUR RADIO**



NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE
--------	------------	----	-------------------	-------	-----------------	------------	------

TO: THIS RADIO MESSAGE WAS RECEIVED AT:
 AMATEUR STATION _____ PHONE _____
 NAME _____
 STREET ADDRESS _____
 CITY AND STATE _____

Telephone number:

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

REC'D	FROM	DATE	TIME	SENT	TO	DATE	TIME
-------	------	------	------	------	----	------	------



**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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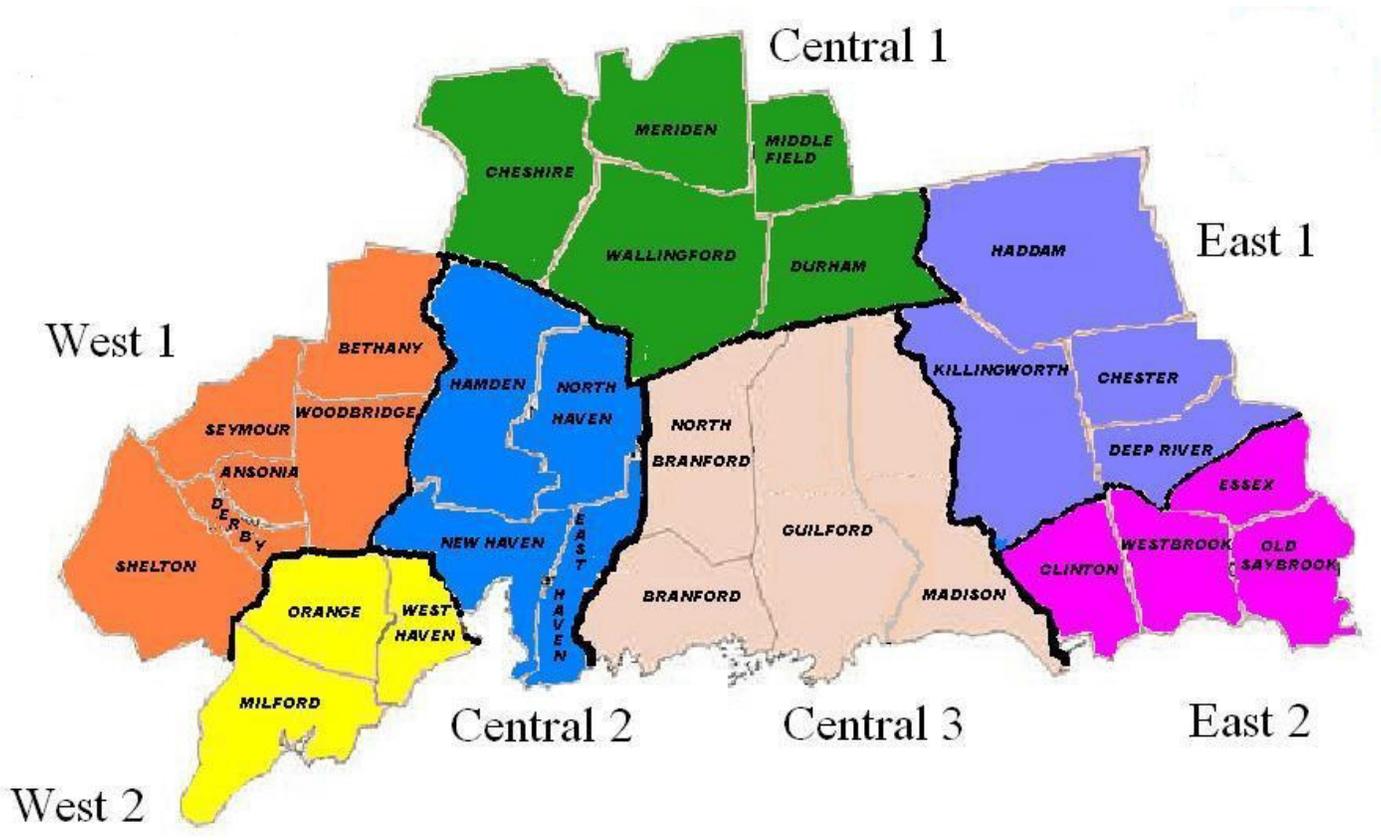
TO: THIS RADIO MESSAGE WAS RECEIVED AT:
 AMATEUR STATION _____ PHONE _____
 NAME _____
 STREET ADDRESS _____
 CITY AND STATE _____

Telephone number:

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

REC'D	FROM	DATE	TIME	SENT	TO	DATE	TIME
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REGION 2 LEADERSHIP BY TOWN AND TEAM

DEC – *Douglas Sharafanowich, WA1SFH*

[e-mail](#)

Region 2 Emergency Coordinators (ECs)

<u>Region 2 - West</u>	<u>Region 2 - Central</u>	<u>Region 2 - East</u>
<u>EC: Edwin Rhodes, WA1LEI</u>	<u>EC: (none)</u>	<u>EC: (none)</u>
<u>Orange</u> Al Mushin, K1QEX <u>e-mail</u>	<u>Cheshire</u> Craig Kalley, N1ABY <u>e-mail</u>	<u>Clinton</u> Ron Klimas, WZ1V <u>e-mail</u>
<u>Milford</u> Edwin Rhodes, WA1LEI <u>e-mail</u>	<u>Durham</u> Dan Murphy, W1DMM <u>e-mail</u>	<u>Essex</u> Don (DG) Fitton, KC1ARE <u>e-mail</u>
<u>West Haven</u> Edwin Rhodes, WA1LEI <u>e-mail</u>	<u>Guilford</u> Sid Gale, N1MVM <u>e-mail</u>	
	<u>Madison</u> John Thomas, K1VW <u>e-mail</u>	
	<u>Meriden, Middlefield</u> Mike Goldweber, KB3IXO <u>e-mail</u>	
Don Cofrancesco, KB1FYK EC - Quinnipiack Valley Health District <u>e-mail</u>		
<u>Unassigned Communities</u>		
Ansonia Bethany Derby Seymour Shelton Woodbridge	Branford East Haven Hamden New Haven North Branford North Haven Wallingford	Chester Deep River Haddam Killingworth Old Saybrook Westbrook

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Art Fregeau, AF1HS

July 21, 2010

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