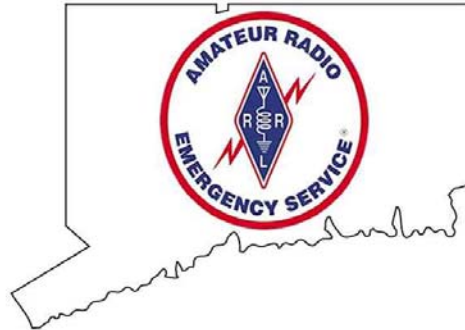


**Connecticut ARES®  
TOPOFF 3  
After Action Report**



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December 20, 2005



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## Foreword

Betsey Doane, K1EIC Section Manager CT Section ARRL

It gives me great pleasure to present this report whose primary author is Chuck Rexroad, AB1CR, SEC and chair of this unprecedented and very successful Amateur Radio effort. As you will read in the introduction, TOPOFF 3 was the largest drill ever to occur in the United States. This document is the culmination of an enormous effort within the CT Section to prepare for and become active in the TOPOFF 3 drill that occurred April 4-8, 2005. I would like to thank Wayne Gronlund, N1CLV, for his superb job editing this document.

It was a privilege for me to serve as Section Manager during all phases of the preparation and execution of this exercise. I am extremely proud of the professionalism and dedication of the entire leadership team and approximately 150 volunteers who participated. The response to calls for help from within this Section and surrounding Sections is a tribute to the importance this group feels about the mission of ARES.

Life was certainly not normal for many of us months before the drill, as there were many details to handle and resources to gather. TOPOFF was a huge effort but a very successful one. Our successes, although not explicitly listed, can be seen throughout the document and also in the PR documents shown in Appendix 5.6. Additionally, interviews with volunteers indicate that, although they had suggestions for improvement, their experience was one which they very much appreciated and enjoyed. See evaluation form Appendix 5.7. Lessons learned are clearly delineated in Section 4.

The joint letter SEC Chuck AB1CR and I wrote to participants just before TOPOFF (quoted below) will give the reader a flavor for the real excitement and enthusiasm that prevailed prior to and throughout the drill.

Top Off is just hours away. Approximately 150 of you have volunteered to be on site and others of you have agreed to give your time from home. We've talked about it; you've listened; you've talked about your preparation; we've all prepared well. You're incredible! Some of you have even in the last couple of weeks taken the Level I course to be sure you're ready! The work that you have done as a group is unbelievable. Some of you have gone well beyond the scope of your normal Amateur radio activities to ensure readiness. We are not only proud but truly privileged to work with you in our leadership capacities. Thank you all for your support and for your marvelous response to this call for action.

Assistant Section managers, DEC's and others have been amazingly resourceful in gathering equipment and providing needed data. Some of these volunteers whom you might thank when you see them are: ASM Brian Fernandez, K1BRF, ASM and general Asst. SEC Rod Lane, N1FNE, ASM George Andrews, N1YAE who did a superb job with the training symposium, DEC Harry Aberly, AB1ER, DEC Bill Barrett, W1WJB, DEC Art Fregeau, K1WMQ, DEC Mac Harper, W1FYM, DEC Henry (Hank) Wolcott, KAIWTS who will be operations manager for our effort at Top Off, DEC Dave Hyatt, K1DAV and Howard W1HSR who, among other tasks, wrote the briefing papers, DEC Phil Berkowitz, WX1CT our Sky Warn coordinator, STM Larry Buck, K1HEJ, ASM and

asst. STM Dan Brochu, KY1F, ADEC Wayne N1CLV, PIC Al W1FXQ and many others. We also wish to publicly acknowledge Mark Mokowski, WA1ZEK and the Middlesex Amateur Radio Society for repairing the W1EDH packet node setup in weather that was not real conducive to antenna work on a holiday weekend. Thank you Van, W1WCG for continuing to make your digital station available for through traffic and for helping out with some of the details. Thank you to everyone from whom we have borrowed equipment--you are all appreciated.

None of this experience would be possible without the invitation of The American Red Cross. Mario Bruno, Director of Disaster Services and Brian, K1BRF continue to work closely together to bring the best of all of our resources together to serve the public. Thank you for your confidence in Amateur Radio and in our volunteers.

The staff of The American Radio Relay League have been a great source of support and encouragement to us. Many have participated in the training symposium and in on-site training and several will be on site as volunteers. Media and Public Relations Coordinator Allen Pitts, W1AGP, Development Director Mary Hobart K1MMH, and Senior News Editor Rick Lindquist, N1RL will be on site in their professional capacities; Allen and Mary will be with the media in the Joint Information Center. Your SM will be leader of the PR team from the marshalling area with SEC Chuck.

This Section truly appreciates the support of ARRL in its help mailing the ARES newsletter, with the purchase of the vests some of you will wear during your shift and with the production of really nice looking brochures for the media.

We are ready. You are ready. Together, we will serve well. Thank you all.

73,  
Betsey Doane, K1EIC SM CT ARRL  
Chuck Rexroad, AB1CR SEC CT ARRL

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I would like to again acknowledge ASM Brian Fernandez, K1BRF for his tireless efforts that really began with the invitation phase; we were invited to participate in TOPOFF as one of the few non-Governmental volunteer groups.

Further, in addition to all those mentioned in the letter quoted above, I wish to specially acknowledge the work of the very organized Area 4 Leadership Team: DEC Hank KA1WTS, ADEC Wayne N1CLV, Bill W1GTT, Chris KB1FUO, Joe K1IKE, Ron K1VSC, Vinny KB1JDX, Scott W1SSN, Tom WA2RYV, and Ed KA1RMV.

All of us very much appreciated the visit by Dave Sumner, K1ZZ, Chief Executive Officer ARRL on Tuesday, April 5. What follows is an excerpt of a letter which Dave wrote during the week of TOPOFF to the Board summarizing his impressions:

Subject: TOPOFF 3

The big event for amateur radio in Connecticut this week was the TOPOFF 3 mass-casualty exercise in New London. It's a major exercise with thousands of participants. Amateur radio's role was simply to provide communications for the Red Cross, which was responsible for mass care: feeding the participants and providing emergency shelters. Even that required scores of ARES volunteers to step forward, which for a weekday event involved some sacrifice for many. . . .

Listening to the tactical net on Monday night made me very proud of our volunteers. Even to my somewhat jaded ears, the level of professionalism and discipline was very impressive. The benefits of the emphasis the ARRL has placed on training over the past several years were clearly evident. Tuesday afternoon I drove down to the staging area at the Chesterfield Volunteer Fire Department. . . .

Even more impressive is what ARES® was prepared to do had the need arisen. The TOPOFF 3 exercise included a power failure at Unified Command. The one radio that stayed on line was ours: ARES had several hours of battery backup already in place. A staged repeater failure? No problem -- the plan included shifting to a second repeater, with a further fallback available if necessary.

The exercise included "red carding" -- springing unexpected problems on the participants. If handed a card that said "You're dead" the ARES operators were told to ask, "Me, or my radio?" -- the point being that nearly everyone had a backup radio!

Had ARES been called upon to do more, ARES was ready -- and the TOPOFF organizers know it.

Below is about the nicest summary of amateur radio's capabilities that I've seen in a long time.

Dave Sumner, K1ZZ

I wish I had the energy to really convey to all of you how much I appreciate all the support that the amateur radio world has provided to the American Red Cross during TOPOFF 3. Operators were there when we needed them and messages got to where they were needed. We have learned a lot about what ARES can really do when things get messy, and TOPOFF 3 has been a clear example of how complicated a disaster can get, and how ARES is always there to provide the support that is needed so we don't have to worry if those fancy satellite phones or blackberrys don't work. When the lights go out, I know I'll see someone's radio dial glowing as the messages keep going.

Mario J. Bruno  
Director, Emergency Services  
CT State Disaster Relations Liaison  
+American Red Cross

And thank you Dave.

Thank you to all who took part in preparing this document. Please know that errors and omissions are bound to occur in any document of this type. The Section Manager takes full responsibility and apologizes in advance.

And finally, because training occurs over a long period of time, I want to thank and remember all of the SECs in the past 15 years: Clark Magness NI1U (silent key), Don Izzo N1HAX, Darrow Loucks WA1D, Mike Sinisi KB1CTC, Jim Ritterbusch KD1YV, Allen Pitts W1AGP, and Chuck Rexroad AB1CR.

Enjoy the document.

## **Introduction**

TOPOFF 3 was the largest disaster drill ever to take place in the United States. TOPOFF 3 was held simultaneously in New Jersey and Connecticut. CT ARES® was asked to provide communications support for the American Red Cross, and to provide backup communications to the Connecticut Office of Emergency Management (OEM). While none of us asked for this opportunity, everyone was determined to show the value of Amateur Radio communications in a large-scale disaster. Hank Wolcott, KA1WTS, DEC for CT OEM Area 4 and Wayne Gronlund, N1CLV, Assistant DEC for CT OEM Area 4 South were pivotal to our success in this operation. The rest of the CT ARES® and Section Leadership teams played important roles in many ways, as discussed in this report.

A drill of this nature provides certain advantages over a real event, but also has some severe disadvantages. On the plus side is the ability to pre-schedule and pre-plan to some extent. On the negative side the drill was a weekday event and employers were not likely to allow employees time off to participate in a drill. This meant some people who wanted to participate simply could not due to job demands. Others were required to take vacation time to participate. The drill did go over 36 hours straight in the beginning, which also provided a number of challenges.

This After Action Report is broken into five sections:

1. Preparation – What we did to prepare for the event
2. Planning – How and why we planned our response
3. Operations – What actually happened
4. Lessons Learned
5. Appendices – e-mails to members and leaders, communication and frequency plans, etc.

It is our sincere hope that this After Action Report will provide insight into our plans and actual operations, and perhaps most importantly our lessons learned.

## **1. Preparation**

CT ARES® had the benefit of a great deal of preparation time before the TOPOFF 3 drill. We used the time as wisely as we knew how. We conducted an ARES® symposium-style training session, a recon rally where people became familiar with the operating area, and other preparation activities. These activities were recognized as providing a great deal of value to ARES® members who participated.

### ***1.1 Training at Newington VFD***

We conducted a training session at the Newington Volunteer Fire Department. The Newington VFD was kind enough to provide us an excellent setting for this training, and we would like to take this opportunity to acknowledge their support. The training format was a day-long symposium-style set of seminars. The agenda was:



Go Kits and Deployment Preparation  
Dave Hyatt, K1DAV  
District Emergency Coordinator, Area 5

Directed and Tactical Nets  
Rod Lane, N1FNE  
Deputy SEC for Technology

Formal Message Handling  
Dan Brochu, KY1F  
Assistant STM  
Author of a training article on NTS which appeared for many years in the ARRL Net Directory

Red Cross "Introduction to Disaster"  
Don Izzo N1HAX  
ARC Instructor

National Incident Management System (NIMS)  
Chuck Rexroad AB1CR  
Section Emergency Coordinator.

Unfortunately there was a hard stop at 4:00 PM which caused the NIMS session to be severely abbreviated, due to some sessions running over. In retrospect the sessions should have been placed in priority order according to participants' familiarity of topics so that this situation would not have occurred.

## **1.2 Recon Rally**

Dave Hyatt, K1DAV, DEC for CT Office of Emergency Management Area 5 had previously held a "Recon Rally" in his part of the state which familiarized people with the area of operation and repeater and other communication coverage. We used Dave's ideas and planning as the basis for developing a Recon Rally for TOPOFF in Area 4 South.

CT ARES® will be providing a significant number of pre-built base, temporary base, mobile, and portable communications for TOPOFF. To this end Rapid Response Teams (RRTs) from around the state will be needed, but since it is being held during the work week the turnout will probably be smaller than if it were a real disaster.

It is well known, of course, that east of the Connecticut River is a black hole that swallows the unwary traveler so in order that we not lose any hams wishing to respond, a recon rally was planned for Saturday, March 5. It was suggested that ARES® members meet somewhere in their home area and check in -- then travel as a group, perhaps at staggered intervals to ease congestion at the marshaling area at this end.

The Recon Rally was held on a Saturday four weeks before TOPOFF at the primary Area 4 ARES® Marshaling Center, the Chesterfield Fire House, and consisted of two primary activities.

The first was a PowerPoint briefing presented by Wayne Gronlund, N1CLV, ADEC for Area 4 South, giving an overview of the area to the 30 rally participants. The briefing outlined all of the significant points of interest in Area 4 South (~ New London County) that might either be “targets” for TOPOFF events or resources to be utilized during the exercise. These locations included defense installations (U. S. Naval Submarine Base, General Dynamics Electric Boat, National Guard Camp Rell), transportation infrastructure (I-95 Gold Star Bridge, Railroad Station and Thames River Railroad Bridge, several Ferry Terminals), commercial establishments (State Pier, Pfizer, Hess Oil terminal), nuclear power stations (Millstone 1, 2, 3), local colleges (U. S. Coast Guard Academy, Connecticut College), and exercise-specific venues (Red Cross New London, Ocean Beach State Park, Fort Trumbull).

The second activity was a Scavenger Hunt (also developed by Wayne N1CLV) where the Rapid Response Teams (each comprised of 2 or 3 ARES® members) had to drive through the area following a series of clues and maps provided in a sealed envelope. During the hunt, each team had to originate and send an NTS formatted message back to the Marshaling Center. The required use of several local repeaters helped to test the exercise frequency plan. Teams also had to contact Groton City EOC on a simplex frequency to pass informal traffic. All teams had two hours to complete the course – all but one team finished within the allotted time. A point-based reward scheme recognized those who used proper NTS procedure, found answers to the clue questions, etc. The event not only helped to familiarize ARES® members from out of the area, it also helped us all get to know each other better.

Please see Appendix 5.2 for more detail on the Recon Rally and Scavenger Hunt.

### ***1.3 Speaking at Club Meetings and ARRL Headquarters***

Chuck Rexroad, AB1CR, SEC for CT spoke at numerous club meetings, and was invited to ARRL Headquarters to brief ARRL on our plans as well as to recruit volunteers. Chuck used a PowerPoint presentation that was slightly modified from the training sessions given at the Newington Fire Department and a handout that was based on the Week 1 and Week 4 TOPOFF weekly bulletins (see Appendix 5.1). The presentation at Hq was well received and numerous volunteers signed up after these sessions. Additionally, the live question and answer discussions provided more information to those attending the meeting, and provided the SEC with additional areas that needed to be considered in planning for the TOPOFF 3 event. Section Manager Betsey Doane, K1EIC reported that the training Chuck provided was very well received; it was the first of its kind given to ARRL staff by volunteers from the CT Section.

### ***1.4 Personal Preparation***

Throughout our preparations as a team we emphasized the need for personal preparedness in terms of items to support one’s well being. We emphasized this frequently in our meetings and discussions as well as the TOPOFF week 5 and Week 6 weekly bulletins (see Appendix 5.1). Our emphasis was on personal self-sufficiency, not just radio equipment. While this event was taking place in a metropolitan area, there was no way to determine exactly when someone’s shift would end, or where they might be at meal times. For this reason, everyone was encouraged to bring food, water, medications, and other essential items and to keep these items with them at all times.

## **2. Planning**

The Section Manager and the CT ARES® Leadership team spent a great deal of time in planning for TOPOFF 3. Hank, Wayne, and Chuck spent several days in the New London area doing planning, and countless hours working with each other and the rest of the CT ARES® leadership team. Planning included: recruiting and sign-up, scheduling and assignments, communications with the team, repeater usage, contingency planning, etc.

### **2.1 Recruiting and Sign-up**

We recruited extensively from CT ARES® members, our neighboring jurisdictions, and even found ourselves with volunteers from areas as far away as Pennsylvania. The Section Manager's e-letters and posts on the CT ARES® Discussion List were especially helpful with recruitment. We gathered a significant amount of information in the sign-up process and asked follow-up questions where necessary. Our sign up "form" which was simply copied into an e-mail and sent to the SEC is shown below.

Please provide the following information:

Full legal name:

Call Sign:

Home Phone:

Work Phone:

Cell Phone:

Address:

What types of positions you can cover (based on the list below):

When available:

April 4 -

April 5 -

April 6 -

April 7 -

April 8 -

(Note: If you say are available from 6:00 am to midnight, rest assured we will not give you an 18 hour shift. It would be helpful if you can tell us the maximum shift duration you are comfortable with - if that is longer than your availability.)

Other information:

The four types of positions are:

1 - Permanent Fixed locations where the radios and antennas are already setup and we just need operators

2 - Temporary Fixed Locations where the communicator will need to bring at least a 25 watt radio, power supply, backup battery and portable antenna with mast

3 - Shadow stations who will stay with key people and will need a Handheld radio and plenty of battery (either AA battery backup or small Gel Cell battery backup)

4 - Mobile in Red Cross or other vehicles will need at least a 25 watt radio, mag mount, and the ability to take power from a cigarette lighter jack or straight from the vehicle battery. These

vehicles will likely be fiberglass. Most people use duct tape to tape a pie pan or some other reasonably sized metal surface to the roof - then put their mag mount on that.

Recruiting was actively performed by Eastern Massachusetts ARES® SEC Rob Macedo and Section Manager Michael Nielsen. When Chuck, AB1CR, provided coordination of ARES® response to the Pentagon on 9/11 for Salvation Army support And Brian Fernandez provided similar support for the Red Cross during 9/11 in New York City, one of the major lessons learned during that operation was the value of Mutual Assistance Teams. This allows for reduced coordination effort and easier planning. We appreciate the ARESMAT team that deployed to TOPOFF under the coordination of Michael Nielsen, SM. (Rob Macedo was unable to attend TOPOFF due to job commitments.)



The above picture shows Betsey Doane, SM for CT and Michael Nielsen SM for Eastern Massachusetts briefing a reporter at the ARES® Marshaling Center during TOPOFF.

## **2.2 Scheduling/Assignments**

Chuck, AB1CR, handled all scheduling and assignments, serving as a central clearinghouse for all sign-ups. An Excel spreadsheet was used to keep track of Red Cross needs, CT OEM needs, reserve staffing and leadership staffing. This spreadsheet was provided to the entire CT ARES® leadership team periodically for their review and input.

## **2.3 Communicating with the team**

E-mail over the Internet was the primary means of communication with team members, individuals, all TOPOFF volunteers, and all CT ARES® members. Numerous conference calls were held with the CT ARES® leadership team as well.

## **2.4 Repeater usage**

All of the local repeaters were made available to CT ARES® by the club trustees. Additionally there was a UHF repeater established in the New London area specifically for the drill. Dana KB1AEV, Rod N1FNE and James WJ1D have established a linked repeater system that covers most of Connecticut on VHF/UHF. All of these repeaters provided exceptional service. Although one repeater in the linked system had to be replaced during the drill, the UHF repeater collocated with it stayed on the air and provided service during the absence of the VHF repeater.

## **2.5 Use of Magnetic Mount antennas on fiberglass vehicles**

Dave Hyatt, K1DAV provided 18” by 24” steel plates and Chuck, AB1CR provided Gaffers Tape which held the plates to the fiberglass roofs without damaging the roofs like Duct Tape does. These plates allowed the placement of magnetic mount antennas on the fiberglass vehicles.

## **2.6. Marshaling Center**

The Chesterfield Volunteer fire Department was kind enough to literally open their doors to CT ARES®. Hank Wolcott – KA1WTS – DEC for CT OEM Area 4 – arranged for CT ARES® to have access to the Chesterfield VFD facilities for the Recon Rally and the TOPOFF 3 drill. The fire chief and indeed all of the Chesterfield VFD members we came into contact with, opened the entire station for our use. We used the bunk rooms, the room we set aside for communications and the bingo room that was our check-in area, refreshment area, and relaxation area. The facilities enabled CT ARES® to have a marshaling center near enough to the event to be there in minutes, but far enough away to be clear of most hazardous materials. We have been provided ongoing access to this marvelous facility at any time we need it. Indeed our directions are: “Don’t call ahead, just come and do what you need, we’ll know you’re here when we see you.” This is the utmost in one volunteer organization supporting another and we are most grateful for this support.



The above picture shows Chuck AB1CR and Hank KA1WTS at the Marshaling Center.

## 2.6.1 Facilities

The Chesterfield VFD provided all the facilities we could possibly want, including several locations for installing antennas which reduced interference. The facilities included 24-hour a day access, rooms and power with automatic generator backup, restrooms, meeting rooms, and bunk room.



The above picture shows Dave K1DAV talking with Roddy KA1BSS and Lee KB1ETR at the ARES® Marshaling Center. The dry erase board in the background was used to show the schedule and location of each operator at all times.

## 2.6.2 Radio/Antenna Plan

The Chesterfield Marshaling center was equipped to handle all CT ARES® communication needs, even though the Tactical Net Control Station (NCS) was planned to be at a nearby ARES® Leaders home. In fact, the Tactical Net was run from the Chesterfield VFD on occasions when the net was slow.

The radios setup at the Marshaling Center included:

- 2-meter radio with magnetic mount antenna for Tactical Net
- 2-meter radio with 3-element beam for statewide linked system Resource Tracking Net
- 2-meter radio with magnetic mount antenna for local Resource Net
- 2-meter radio with TNC and laptop for APRS which was used to track shuttle vans
- Icom 706 connected to 1/2 wave dipole for 3.965 MHz (NTS and ARES® Nets)
- 47.42 MHz commercial with appropriate Ringo for Red Cross liaison
- 800 MHz scanner for listening to ITAC/ICALL 800 MHz interoperability communications

The 3-element beam was located at the front of the Fire Station. The APRS and local Resource net antennas were on the side of the building running low power. The 47.42 Ringo was located on the back of the building along with a 2-meter antenna. The HF dipole was strung from the siren tower (using a pulley and rope installed by the Chesterfield VFD) and a rope over a tree placed using a Wrist Rocket and fishing reel.

Two radios were placed at the front of the room for the Tactical net and the State-Wide Resource Net, the rest of the radios were placed along the side wall, in this order, closest to the front Local Resource Net, 47.42 MHz radio, APRS, and the Icom 706 as pictured below.



The above picture shows Jim KB1KCA manning the jump-kit radio that was used for monitoring the Tactical Net as well as running the net when it was slower.



The above picture is Betsey Doane, K1EIC, CT SM using a jump-kit radio to NCS the Local Resource Net.



The above picture shows Chris KB1FUO and Emil KB1KMW. Chris was monitoring the tactical net while showing Emil how to use the APRS software.

### **2.6.3 Emergency Power**

The Chesterfield VFD has an automatic-start emergency power generator. In fact the Saturday we held our Recon Rally was during their weekly generator test and we were completely unaware we were actually operating on generator power until notified that it was time to switch back to commercial power and that there might be a momentary power interruption.



## 3. Operations

### 3.1 Marshaling Center check-in and assignment

1. Ample parking facilities were available at the Center. Signs were placed at the Marshaling Center entrance directing personnel to the Check-In desk. Here, they were handed a packet of material which included the following:

- a) an ARES®-type application in which they stated their call sign, name, address, various telephone numbers, email address, etc. They also listed their license type and the type of operating they did and the bands they normally operated on. Additionally it contained a place where the check-in manager could verify and write down the volunteer's CT Drivers' License number and verify that the volunteer had a legitimate and current Amateur Radio license. He initialed this form stating that these documents had been verified.
- b) an emergency reference sheet containing emergency contact data, medical data and the like in case they became injured or sick while on duty. This was placed in an envelope and sealed. The envelopes were not to be opened unless there was an emergency and they remained sealed throughout the drill and were all shredded following the completion of the drill without ever being opened.
- c) a Volunteer Assignment Information Sheet where there were places to enter the ARES® Team Leader's name, the volunteer's call sign, the assigned Tactical call sign, if appropriate, the Served Agency's name he or she was being assigned to, the Agency's point of contact's name and the location at which the person was to be assigned to. Additionally, this same sheet contained the contact numbers for all the ARES® Officials as well as frequency information of the various nets. A list of Served Agencies was also included on that sheet. On the backside of that same sheet were a checklist of items to take upon arrival at the Served Agency, how to set up the station, what to do after the station is on the air and basically a quick review of how to serve the Agency.
- d) an Exercise Frequency Plan which translated all of the available frequencies in use during the drill to such names as "Alpha," "Bravo," "Charlie," etc. This simplified the transmission of frequency assignments over the air without actually divulging the frequencies and made the plan consistent with ICS frequency format. Anybody asked to proceed to "Sierra" simply looked at their sheet and knew the frequency they had to change to.
- e) lastly, a 4-page document containing "briefing" information: what to have with you *before* leaving for your assignment, safety considerations, dress codes, expected behavior, etc.

2) Upon filling out the ARES® application and getting the licenses verified, they were requested to go to the Assignment Desk. Here, their Emergency Data envelope was taken and placed aside. Their application was examined and their name cross-matched to a duty roster that had been prepared ahead of time. On their Volunteer Assignment Information Sheet, their team leader, call sign, Tactical call sign, their Served Agency, the Agency's point of contact's name and the location to where they were to report were all entered and given to the volunteer. All volunteers were issued an ID badge. If they were being assigned to a Red Cross location, they were additionally issued an ARES®

vest. All their pertinent data (name, call, time of arrival, TAC call, vest #, time of deployment, etc.) was entered on a log sheet. This provided a ready reference for others when trying to determine the status of any volunteer. Some volunteers had to borrow a radio in order to fulfill their assignment. The radio type and serial number were also tracked at the assignment desk.

3) A magnetic white board was made available to officers at the Center. Magnetic business cards were made up by Wayne Gronlund N1CLV, ADEC Area 4 South, prior to the operation which contained each volunteer's call sign and name. The board was drawn up into a grid-like arrangement consisting of various assignments. As people were assigned and reached their assignments, their magnetic cards were placed in the appropriate grid. Those in transit to their assignments were grouped together in a corner of the board indicating that that had been processed through the Center.

4) Upon returning to the center, individuals were logged back in and their vests and/or badges reclaimed. They were either placed back on stand-by status or if they had fulfilled all their assignments, they were free to return to their homes.

### **3.2 American Red Cross check-in and assignment**

After checking in at the ARES® Marshaling Center, all Amateur Radio Operators who filled any assignment “inside” the exercise area (e.g., ERVs, Unified Command Center, etc.) had to check in again at the American Red Cross chapter house in New London. Execution of an American Red Cross Local Disaster Volunteer Staff Registration (ARC Form 1492A) was required. Upon completion of processing, participants were issued red neck lanyards and Red Cross stick-on name tags to indicate they were officially part of the exercise. At that point they stood by for transportation or proceeded to their assignment as appropriate.

### **3.3 On-Air Operations**

#### **3.3.1 Tactical Net**

The Tactical Net served as the primary voice communications network for TOPOFF 3 Amateur Radio operations. The primary Net Control Station (NCS) for this net was Wayne Gronlund N1CLV, ADEC for Area 4 South. He was so designated because he had the best overall knowledge of the area, concept of operations, resources available, and experience. Prior to the exercise, the decision was made to have the Tactical NCS operate from a location separate from the Marshaling Center whenever possible. The expected activity and noise level at the Marshaling Center was likely to make operating as NCS difficult. In fact, Wayne N1CLV operated from his home station since it had redundant VHF/UHF radios and antennas; APRS, packet, and HF capabilities; cellular and landline telephone service; broadband Internet access; and was located less than five miles from the Marshaling Center. In order to provide operator relief for N1CLV, personnel at the Marshaling Center served as alternate NCS as needed.

#### **3.3.2 Command Net**

An “unpublished” 440 MHz repeater was setup at the W1AAA/R Salem repeater site and made available to be used as a dedicated ARES® Command Net. This repeater/frequency provided a means for senior ARES® leadership personnel (SEC, DECs, ADECs, SM, NCSs) to coordinate

operations and discuss issues “semi-privately” without interfering with the normal Tactical and Resource Net operations. However, all particularly sensitive discussions were conducted “off the air” -- either in person or via telephone (cellular or landline).

### **3.3.3 Local Resource Net**

When incoming exercise participants got within range of the Salem 147.06 repeater (W1AAA/R), they were asked to check in with the Local Resource Net to provide Marshaling Center officials with an updated estimated time of arrival. This net provided a means to assist any operators from out of the area with final directions to the Marshaling Center as needed. This net also tracked operators after they departed the Marshaling Center enroute the Red Cross shuttle area.

### **3.3.4 Statewide Resource Tracking Net**

Operators participating in the exercise were asked to check in the Statewide Resource Tracking Net upon departure from home. This was done using the statewide linked repeater system. A Net Control Station at the Marshaling Center kept track of those stations while they were enroute to allow for any needed scheduling adjustments.

### **3.3.5 Packet**

Use of VHF Packet was expected and the capability was available at the NCS and Marshaling Center operating positions. Plans called for using the N1NW (145.03 MHz) and W1EDH (145.09 MHz) digipeaters and their respective bulletin board systems (BBS). Since most of our efforts during the exercise were ultimately focused on tactical voice communications between Red Cross vehicles, the food service location, and Red Cross headquarters, very little actual use was made of packet communications.

### **3.3.6 Automatic Position Reporting System (APRS)**

Several exercise participants had APRS capability. APRS map plots were maintained by the Tactical NCS and by operators at the Marshaling Center and the Unified Command Center (UCC). APRS was used to track some of the incoming ARESMAT personnel from other OEM Areas. Use of APRS trackers on Red Cross vehicles not staffed by full time Amateur Radio operators also provided a means of tracking some of our resources. All of the Red Cross Emergency Response Vehicles (ERVs) had operators assigned, but the personnel shuttle vehicles (usually small vans) were of limited capacity – using a seat for an operator would have reduced their capacity even more. For operational security, the APRS unproto paths were set to “NOGATE” to prevent RF signals from being gated to the Internet.

### **3.3.7 HF**

A full-size resonant 80 meter dipole was installed at the Marshaling Center, due to the generous efforts of the Chesterfield Volunteer Fire Department who installed a pulley for us near the top of their siren tower. Hank Wolcott KA1WTS, DEC for Area 4, was instrumental in working with the fire department to get this done. The HF antenna was used to pass NTS traffic on 3.965 MHz until interference with Fire Department radios was noted. Due to other outlets/frequencies being available for the traffic (and a lack of time), troubleshooting was not done to attempt filtering to alleviate the interference and the HF radio was not used further during the exercise.

### **3.3.8 Red Cross 47.42 MHz**

Due to the generosity of James, WJ1D, we were able to install a radio operating on the national Red Cross frequency of 47.42 MHz. This radio was connected to a 6-meter Ringo which had been previously re-tuned to 47.42. For reasons that we never understood, no radio traffic was heard on this frequency. The Red Cross New London Chapter did use 47.42 to talk to some of the Red Cross mobile units, but we were unable to receive their base station or any of the mobile units.

### **3.3.9 Contingency planning for NCS and repeaters**

In order to provide contingencies in case of the actual or simulated loss of our primary repeaters, the ARES® TOPOFF Frequency Plan (Appendix 5.4) designated both a secondary/backup repeater and a tertiary/simplex frequency for each of the nets or functions. These designations were made based on the area of effective coverage of the respective repeaters and whether they had emergency power available. As can be seen from the Frequency Plan, this area is reasonably “repeater rich” and suitable alternative repeaters were readily available.

As part of Area 4’s prior contingency planning, a simplex site had been identified that would allow the TOPOFF NCS to use a mobile or portable station to cover the necessary operational area without the use of repeaters. The site is conveniently close to the Marshalling Center at the Chesterfield Firehouse (less than 3 miles direct and 5 miles by road) and could be reached by a mobile unit within 10 minutes if needed. The utility of this site was initially determined by use of topographic maps to evaluate terrain considerations. The site is located on a broad hilltop about 600 ft above sea level and has a little-used open parking lot area available for setting up a portable station. (The fact that the telephone company had long ago located several microwave relay towers in the same area served to validate the preliminary conclusion.) After selecting the site, operational tests were conducted during the regularly scheduled Area 4 South ARES® training nets prior to TOPOFF to confirm the expected coverage.

### **3.3.10 Use of Unified Command for NCS overnight**

ARES® had an operating position in the Unified Command Center, on behalf of the American Red Cross. The station was equipped with APRS as well as VHF/UHF voice. During the overnight shift, this station became the net control for all Amateur Radio communication when the Chesterfield Fire House and N1CLV locations were shut down. Communication was maintained with the SEC at the Chesterfield fire house throughout the night, and approximately six ARES® members also spent the night at the Fire House as a ready-reserve in case there were any needs encountered overnight.

### **3.3.11 Unified Command Emergency Power**

Automatic switching to battery backup was put in place at the Unified Command Center (UCC) due to the fact that power at that location appeared to be a potential source of difficulty. West Mountain Radio’s DC-to-Go, along with a Rig Runner, PowerGate, and a 12-volt 1-amp Sealed Lead Acid automatic charger, were put in place to run the radio and APRS system at Unified Command. The radio was a Kenwood TM-D700A APRS mobile radio which was used on VHF/UHF voice and 2-meter APRS simultaneously. The laptop ran on AC power until manually switched to a power inverter. This system allowed the ARES® UCC station, including APRS, to stay on the air during simulated and real power outages.

### **3.4 Public Relations**

Reporters from many of the major news agencies gathered in the media area where they received frequent official briefings on the status of the drill. Media and Public Relations Manager Allen Pitts, W1AGP and Chief Development Officer Mary Hobart, K1MMH were both on hand to speak directly with reporters and give them a packet of information relating to ARES and our operation at TOPOFF. This packet included a modified version of the CT ARES® brochure (Appendix 5.6) along with contact information to the SEC and the SM who were both coordinating information to reporters from the marshalling center. A separate cell phone line was used for this purpose.

Operators in the field were also given instructions to direct reporters to the Marshalling Center for information. It was felt that operators should not be disturbed while performing their duties because, among other reasons, the Amateur radio effort was accountable to evaluators who were assessing the entire TOPOFF event.

Some calls were received at the Marshalling Center but not nearly as many as expected primarily because Allen and Mary were on hand to give them good information. However, several interviews with reporters were conducted and news articles written; see Appendix 5.6.

## **4. Lessons Learned**

### **4.1 Transportation**

Transportation from the ARES® Marshaling Center to the Red Cross facility for sign-in and then to assignments was the single largest difficulty encountered in the ARES® response to TOPOFF. It is the decision of the CT ARES® Leadership Team that in any future drill or actual deployment CT ARES® will be responsible and will provide for transportation of ARES® members. We feel that we can perform this function more efficiently than another organization because we know our own needs and have the communication capabilities to coordinate this activity.

### **4.2 Sign-in process and Equipment Checkout**

The sign-in process for ARES® members needed to include an equipment checkout phase. A service monitor or at least a frequency counter should be in place, as well as a radio programmed to act like each of the repeaters will provide the ability to ensure that ARES® members have their radios properly programmed and in good working order before they are deployed. With the use of Anderson PowerPoles it is straightforward to provide power for mobile radios for checkout.

### **4.3 Scheduling/Assignments**

In retrospect it would have been more appropriate to have someone other than the SEC handle scheduling and assignments. There was a significant amount of “administrative” work which could have been delegated. This would have freed the SEC from a number of competing priorities in the last few days before the drill. The situation was exacerbated by the fact that the entire plan and schedule for the drill was changed on the Friday afternoon immediately before the drill which ran Monday through Friday the next week.

### **4.4 HF Interference with Fire Station Radios**

We tested for interference between our radios at the ARES® Marshaling Center in the Chesterfield Volunteer Fire Station prior to the drill, but during the drill found out that our HF radio on 3.965 MHz interfered with the Fire Department station radio to the extent that we had to terminate HF operations. It turned out this was not a significant problem, but there are parts of CT that terrain limits from reliable communications except HF. While we could easily relay through our Tactical Net Control, located a couple of miles away in the home of an ARES® leader, or we could have relayed through relay stations, it is important to check the operation of any local 2-way or other radios as part of equipment testing.

### **4.5 Logistics with Red Cross**

Logistics coordination with the Red Cross was somewhat hampered by their use of Amateur Radio operators who were affiliated with and known to the Red Cross chapter personnel, but who were not as familiar with directed net and other ARES® procedures as we would have liked. Some of their operational issues also resulted from the radio operator not having anyone available at the Red Cross chapter house to coordinate and to answer the specific questions being asked by the Red Cross units conducting field operations (ERVs, etc). At opportune times the Tactical Net Control Station was able to do some limited “on air” training with the Red Cross

operators to improve the overall flow of tactical traffic. Future operations will include an explicit assignment of an ARES® liaison operator even if other Red Cross affiliated Amateur Radio operators are present.

#### **4.6 Message Prioritization on a Tactical Net**

As the drill came to a close we realized that there was one pivotal station in our efforts to support the Red Cross Mass Care – Feeding. That was the kitchen that was preparing the meals and was staffed by a key Red Cross person. With the value of hind-sight it is easy to see that having this station listen on one of the alternate 2-meter repeaters would have enabled the Tactical Net Control station to simply direct people to that alternate frequency and continue to handle other traffic. This would have placed all the high priority traffic on one channel, away from lower priority as well as possible emergency traffic.

#### **4.7 Debriefing volunteers on finishing assignment**

Debriefing of volunteers did not occur as thoroughly and as formally as originally planned, even though there were sufficient ARES® leaders available most of the time to do so. This will be a high priority in future drills and deployment. While we did hear anecdotally from ARES® members upon their return, we certainly lost some information by doing this informally.

#### **4.8 TOPOFF ARES® leaders needed to communicate in some fashion — we had the means but didn't do it as well as we might have**

We had a significant number of ARES® leaders, and the Section Manager at the ARES® Marshaling Center, but did not have scheduled team meetings or discussions. In retrospect it would be good to have such meetings during the inevitable quiet period when a group of ARES® members had been sent out. Such meetings need to occur at least twice a day, and even better would be four times per day. This would assure all leaders that they have current information and that all pertinent discussion takes place with the entire leadership team.

#### **4.9 Marshaling Center check-in and assignment**

1. The check-in process must be more thorough. Many volunteers were admitted without their admittance sheet showing their CT Drivers' License or government-issued ID Number or the fact that their Amateur License was actually presented. By having additional entries on the form showing the expiration dates for these documents and having the assignment desk double-check and initial that they've checked the form would alleviate the possibility of unauthorized personnel arriving on the scene.
2. The assignment desk needs more thorough documentation on given assignments. A volunteer would walk up and ask who he would be reporting to and where he was expected to go. Although the assignment forms had an entry for the person to report to, none of this was known to the assignment person and was either left blank or the Marshaling Center's on-site manager's name was entered.
3. Many volunteers asked for directions to pick up the shuttle bus. Although there were printed route maps available, some road construction and detours near the shuttle site created confusion for operators not familiar with the area. When possible, each person being told to drive to an off-site location to pick up transportation should be given a

hand-out showing turn-by-turn directions to get there. Those volunteers possessing GPS units would be appreciative of actual address data consisting of number and street.

4. There was no pre-determined routine in place to track whether the people due at the Center were actually going to be there on time. This meant that schedules had to be shuffled to help fill those assignments that were due but still left unassigned. A better communications system between the Enroute Tracking station and the Intake or Assignment Desk would have helped keep assignments from being missed. Additionally, instructions to the volunteers prior to their departures from home should stress the importance of being on time.

5. The use of assigned tactical calls was important when making assignments. There were both “long” tactical calls (e.g., “Tactical Net Control”) and “short” TAC calls (e.g., “TacNet”). These tactical calls allowed the Tactical Net to flow smoothly and with continuity even when actual operators changed. When personnel were enroute to and from, use of their FCC callsign made it clear that they were operating as an individual (necessary during shuttle transportation, etc). Instructing personnel not currently assigned to check in with their status at least hourly would have helped keep all assignments filled. There were almost always volunteers standing by at the Center to help fill in assignments that had been lost or changed.

6. The routine for checking people back in was at times confusing. There were ARES® vests distributed that required tracking, there were radios loaned that needed to be returned and there were badges that were distributed, but hardly used. ARES® identification badges should have been developed for our personnel whether they were “accepted” by field personnel as ID or not. They would have at least advertised that ARES® was there! Although most people returned to the Center to return their material, some kept their material for the three days they were on duty.

7. A suggestion was made that the assignment, tracking of personnel, deployment status and the personnel database be automated to the extent possible in a user-friendly Windows-type environment where a laptop can make the assignments based on the availability of the volunteers, track their deployment to their assignments, and finally their release from these assignments to return to the Center. Such a system networked at the Center at critical posts would have kept all the data current and available.



## 5. Appendices

### 5.1 Weekly Bulletins

#### Weekly Bulletin #1 – Introduction to TOPOFF 3

I will be sending out these bulletins roughly one per week with information about the upcoming TOPOFF drill, the largest disaster drill ever to occur in the United States. There is a fair amount of information available on the Department of Homeland Security / Federal Emergency Management Agency (DHS/FEMA) web site at

<http://www.dhs.gov/dhspublic/display?content=3427> and

<http://www.state.gov/s/ct/rls/fs/2002/12129.htm> and more information about Connecticut's

response at <http://www.ct.gov/governorrell/cwp/view.asp?A=1719&Q=288404>. The drill is now seven weeks away.

This week I will provide the basics of the upcoming drill. The drill will take place from April 4 through April 8 (yes that is Monday through Friday). We will be primarily involved in providing communications support to the Red Cross and the State of Connecticut. The drill will take place mainly during the normal workday but there will be day(s) where we will need a second shift to continue our support through the day and into the evening.

There will be at least four types of operator positions needed for the drill. If you are new, or you don't have equipment, you are not excluded. We need people to assist with the operations at several locations which is a great way for a new person to get up to speed, and many of us have equipment to lend for those

who need it. The four types of positions are:

1 - Permanent Fixed locations where the radios and antennas are already setup and we just need operators

2 - Temporary Fixed Locations where the communicator will need to bring at least a 25 watt radio, power supply, backup battery and portable antenna with mast

3 - Shadow stations who will stay with key people and will need a Handheld radio and plenty of battery (either AA battery backup or small Jell Cell battery backup)

4 - Mobile in Red Cross or other vehicles will need at least a 25 watt radio, mag mount, and the ability to take power from a cigarette lighter jack or straight from the vehicle battery.

Once we have all the voice positions covered, we plan to use packet to provide digital communications.

There are a number of activities that will be taking place to help us prepare for this drill. Those will be discussed in the next TOPOFF Bulletin, but if possible, please set aside February 26th now for an ARES® training session and meeting.

Thanks and 73,  
Chuck AB1CR

## **Weekly Bulletin #2 – Recon Rally**

I want to encourage everyone to consider participating in Hank's [and Wayne's] Recon Rally where we will learn more about our coverage of the areas involved as well as improve our personal knowledge of getting around the areas. By the way, if you have APRS capabilities please make sure you run APRS mobile for the Recon Rally. We'll be watching APRS and will have some loaner units too. This will allow us to see where people are when they check in with us, and allow us to help people navigate, if they need it.

I'll be there and I hope to see you there!

73,  
Chuck  
AB1CR

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Everyone by now should know what TOPOFF 3 is. If you don't, it is a major drill to be held on the first full week of April this year. It is to be a simulated terrorist event centered on the Groton/New London area. We have here a cargo pier, the sub base, Electric Boat (where they build subs), Phizer plants and world headquarters, a major route 95 bridge, and nearby a nuclear generating plant. Not to mention two casinos but I doubt that even the feds would dare interfere with gamblers in a hurry to lose money.

CT ARES® will be providing a significant number of pre-built base, temporary base, mobile, and portable communications for TOPOFF. To this end Rapid Response Teams from around the state will be needed but since it is being held during the work week the turnout will probably be smaller than if it were a real disaster.

It is well known of course that east of the Connecticut River is a black hole that swallows the unwary traveler so in order that we not lose any hams wishing to respond a recon rally is planned for Saturday, March 5. It will start here at 0900 and end approximately at 1200. It is suggested that you meet somewhere in your area and check in then come as a group, perhaps at staggered intervals to ease congestion at the marshaling area at this end. Details will be forthcoming at a future date but this should enable your planning.

Please if you can let me know that you are coming so I can plan appropriately. Thank you.

73 de Hank KA1WTS DEC Area 4

## **Weekly Bulletin #3 – ARES® Symposium**

Please join us for the ARES® Symposium on February 26th. George and Al and others have put a lot of time and effort into making this a reality and we look forward to seeing you there. This will be very important information for anyone in CT ARES®, especially those participating in TOPOFF.

Hope to see you there! Chuck

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\*Announcing the CT ARES® SYMPOSIUM - Please sign up by sending an e-mail to [gandrews@ntplx.net](mailto:gandrews@ntplx.net). Seating is limited and we want to provide appropriate food and refreshments, so please let us know you are coming. We are asking a \$10.00 donation to cover morning snack, coffee, lunch, etc. \*

Saturday 2-26-2005

Newington Fire Department HQ

1485 East Main Street

9:00 Registration (Sign In)

9:30 Introductions

9:35 Go Kits and Deployment Preparation

Dave Hyatt, K1DAV

District Emergency Coordinator, Area 5

10:35 Break

10:40 Directed and Tactical Nets

Rod Lane, N1FNE

Deputy SEC for Technology

11:40 Lunch

12:40 Formal Message Handling

Dan Brochu, KY1F

Author of an NTS tutorial published for years in the ARRL Net Directory

1:40 Break

1:45 Red Cross "Introduction to Disaster"

RC Instructor

2:45 NIMS (National Incident Management System)

Chuck Rexroad AB1CR

Section Emergency Coordinator

3:45 Break

3:50 Closing Comments

Chuck Rexroad

4:00 Meeting ends

**PARKING**

All cars must be parked in the rear lot. Do not block the fire doors or the rear driveway entrance.

**Directions**

It is on route 176 or Main Street between Centerwood and Southwood Road. It is less than a half-mile from Lentini Communications.

Notice: No one is allowed in the apparatus bay unless accompanied by a member of the

Newington fire department.

Thank You To: Thanks to the Newington Fire Dept for hosting the event and our presenters for making this event possible. A note of thanks goes to Al Cohen for his help in finding a location.

The CT ARES® Symposium announcement has been posted on the web page in upcoming events.

## **Weekly Bulletin #4 - Availability**

Fellow SECs. Below is a modified version of the note I sent to all CT ARES® members. Please modify it to meet your needs in terms of recruiting. I do hope that we can get information on availability soon so we can start planning our efforts. As you gather information from your section, please send it to me at [ablcr@comcast.net](mailto:ablcr@comcast.net). Please do not wait to get all of the information. Feel free to send it weekly or whenever you feel you have enough to send.

As always - Thanks for all your help and support! 73, Chuck AB1CR

Please remember the ARES® Symposium next Saturday 2/26 (contact [gandrews@ntplx.net](mailto:gandrews@ntplx.net) for details) and the Recon Rally the following Saturday 3/5 (contact [henry\\_f\\_wolcott@sbcglobal.net](mailto:henry_f_wolcott@sbcglobal.net) for details)

As TOPOFF 3 approaches we need to start gathering information on who is available when and what types of positions they can cover. For those who are deploying as teams, we still need the information on each team member to keep accurate records. Even if you already have a position you are committed to, please send me your information so that we may have a complete record of all who participated in this event.

I will be building our roster of available participants and passing that on to Chuck Rexroad, AB1CR - SEC for Connecticut. Hank Wolcott, KA1WTS - DEC for Area 4, will assign people to positions. We would like to get this information as soon as possible so that we can start working on assignments. It may be a few weeks before we can make assignments. At that point we will ask you to commit to the assignment or to tell us you need some other type of assignment or timing. As all of you know, this is a huge chance to show Amateur Radio at our best. As always, flexibility will be key. This is a disaster drill and it is likely we will need to make some assignment changes on the fly to meet the needs of our served agencies.

We appreciate all the help and support we can get!

Please provide the following information:

Full legal name:

Call Sign:

Home Phone:

Work Phone:

Cell Phone:

Address:

What types of positions you can cover (based on the list below):

When available:

- April 4 -
- April 5 -
- April 6 -
- April 7 -
- April 8 -

(Note: If you say are available from 6:00 am to midnight, rest assured we will not give you an 18 hour shift. It would be helpful if you can tell us the maximum shift duration you are comfortable with - if that is longer than your availability.) Other information:

The four types of positions are:

- 1 - Permanent Fixed locations where the radios and antennas are already setup and we just need operators
- 2 - Temporary Fixed Locations where the communicator will need to bring at least a 25 watt radio, power supply, backup battery and portable antenna with mast
- 3 - Shadow stations who will stay with key people and will need a Handheld radio and plenty of battery (either AA battery backup or small Jell Cell battery backup)
- 4 - Mobile in Red Cross or other vehicles will need at least a 25 watt radio, mag mount, and the ability to take power from a cigarette lighter jack or straight from the vehicle battery. These vehicles will likely be fiberglass. Most people use duct tape to tape a pie pan or some other reasonably sized metal surface to the roof - then put their mag mount on that.

## **Weekly Bulletin #5 - Equipment**

First a Thank You! to everyone who made Saturdays training program a success. And please don't forget the Recon Rally this coming Saturday. (More details are available from [N1CLV@aol.com](mailto:N1CLV@aol.com))

This week's topic is equipment. When I was on a search and rescue team there were 10 items we were never allowed to deploy without. While we saw some very impressive jump kits Saturday, there is a lot a person on a budget can do to be ready. In fact, you don't need any equipment to participate in TOPOFF. Depending on your skills and experience we can either team you up with another operator or loan you equipment. Please do remember to bring the following items no matter where your assignment is.

- 1 - Enough medications for two days. (While we certainly don't expect to need that, it is the proper way to prepare.)
- 2 - Pen/Pencil and a small notepad. Our role is to clearly and accurately send and receive information. We can't do that from memory.
- 3 - Some type of light. We will likely be working after dark
- 4 - Earphone or headset. Absolutely required in order to hear in many of the areas we will be in.
- 5 - Food and Water - It is impossible to know where you will be when you get hungry or thirsty.
- 6 - The frequencies and event information. This will be provided to you at the briefing, but also by e-mail in advance so you can program your radio ahead of time.

7 - Spare batteries for your radio. If you bring a handheld without spare batteries, please tell the people at the staging area of the situation. Without spare batteries (preferably a AA Alkaline battery case and at least two spare sets of batteries) we cannot rely on your radio to last throughout even a short shift.

8 - Your Drivers License and Amateur Radio License. Without these you will not be able to receive credentials for the disaster or drill.

9 - Emergency Contact information. Each person will be asked to fill this in at the ARES® staging area. Each person will then place the document in a sealed envelope with their name on it. The envelope will only be opened in event of an emergency.

10 - Money, spare keys, maps, etc.

While there is certainly a lot of other equipment that will be needed for some locations, anyone who comes to staging without these items (without making arrangements in advance) will likely be asked to stay in the staging area and help us with things that need done there.

We need upwards of 25 people, working three shifts a day, between April 4 and April 8. Please contact [ab1cr@comcast.net](mailto:ab1cr@comcast.net) if you can help! We'll get more details on the needs out shortly, but please let us know if/when you can help!

Thanks and 73,  
Chuck AB1CR

## **Weekly Bulletin #6 - Safety**

First of all, thank you to all of you who have volunteered. We are still about 50% short of the total number of operators we need to do the best possible job, so for those who have not volunteered, now is a great time to let us know your availability. The sign up "form" is below. Just highlight it, do Edit Copy, create an e-mail to me ([ab1cr@comcast.net](mailto:ab1cr@comcast.net)) and paste the form in, then answer the questions and hit send. We need people Monday, Tuesday and Wednesday (April 4-6) daytime, evening and overnight and we need to be prepared to respond on Thursday and Friday but will likely not be activated. Thanks!

This week's topic is safety. When working in a mass casualty incident, even a drill, it is easy to feel pressure to do things quickly. This is often counter-productive. We need to setup stations as quickly as possible, without taking shortcuts or reducing safety. Some of you will be putting up temporary antennas, others will be running extension cords, while some others will be in temporary mobiles, and some will be shadow operators. Each of these provide some very important safety issues.

Temporary Antennas - PLEASE be very careful and look up! It is a known aspect of human nature that we seldom look up. Make sure there are NO POWER LINES near where you are putting your antenna. Consider who might be hurt or where the antenna might fall if there is a problem like high winds. Make sure that the feedline is properly secured so that people will not

trip over it, inside or outside the building. Duct tape is good for taping the feedline to the floor so people won't trip over it. If you use guy lines, put some kind of flag, surveyors bright tape, or something at eye level so people do not run into the guy lines.

Running Extension Cords - We need to be very careful not to overload outlets. We also need to secure any extension cord we install with duct tape if it is anywhere a person may be walking, in order to reduce the tripping hazard. Please remember that others will likely be wanting to tap into the same power source, so having battery backup, while not a safety issue, is a good operating practice.

Temporary Mobile Stations - We need to be very careful not to create any driver or passenger safety hazards. No cables should run in front of an airbag, nor should any equipment be installed in front of an airbag. All wiring should be neat and secured so that you and others can in and out of the vehicle easily and safely. Masking tape works great for securing wires for the day without damaging anything.

Shadow Stations would appear not to have safety issues, but here too we need to be careful not to create any tripping hazards, not to leave a bag of equipment somewhere, etc.

Jell-Cell batteries are the common source of extended power for our equipment. These can provide almost unlimited current for a short period of time and then explode, showering those nearby with sulfuric acid. PLEASE make sure that there is a fuse near the power source, Jell-Cell, vehicle battery, etc. Radio manufacturers put fuses near the radio. This protects the radio but does nothing to protect you! It is very important that you have a fuse within a few inches of the connection to any power source.

General Safety - Please make sure that everything you bring, from the knapsack to the radio has at least your name and call sign on it. It would be very embarrassing if they have to stop the drill because a ham left a bag of batteries, wires, and the like on the ground and their name was not evident.

If someone tells you to evacuate a location, leave immediately! Do not try to gather your equipment, just do what you would if you could see fire approaching you. Get Out! You won't know, and the person telling you may not know, if this is real or part of the drill. If someone tells you to leave a particular area, just ask them which direction they would like you to go.

One of the key principles of the Emergency Medical System and Search and Rescue is "Don't become the second victim!" We need to be sure that everything we do is safe and helps the people we are there to assist. If you have any questions, now or during the drill, contact me (AB1CR) or Net Control.

One final note. When you check into the ARES® Staging area you will be registered as being active. When you leave, you must check out at the ARES® staging area. We very much want to make sure we don't lose track of anyone.

Thanks to all of you for your willingness to help and 73,  
Chuck AB1CR

Please provide the following information to [ab1cr@comcast.net](mailto:ab1cr@comcast.net): [<mailto:ab1cr@comcast.net:>](mailto:ab1cr@comcast.net)

Full legal name:

Call Sign:

Home Phone:

Work Phone:

Cell Phone:

Address:

What types of positions you can cover (based on the list below):

When available:

April 4 -

April 5 -

April 6 -

April 7 - standby only - we think

April 8 - standby only - we think

(Note: If you say are available from 6:00 am to midnight, rest assured we will not give you an 18 hour shift. It would be helpful if you can tell us the maximum shift duration you are comfortable with - if that is longer than your availability.) Other information:

The four types of positions are:

1 - Permanent Fixed locations where the radios and antennas are already setup and we just need operators  
2 - Temporary Fixed Locations where the communicator will need to bring at least a 25 watt radio, power supply, backup battery and portable antenna with mast

3 - Shadow stations who will stay with key people and will need a Handheld radio and plenty of battery (either AA battery backup or small Jell Cell battery backup)

4 - Mobile in Red Cross or other vehicles will need at least a 25 watt radio, mag mount, and the ability to take power from a cigarette lighter jack or straight from the vehicle battery.

## **Weekly Bulletin #7 – Incident Command System**

First of all, Thank You to all of you who have signed up to volunteer at TOPOFF. Initial assignment e-mails will go out today and the communications plan will go out next weekend to those who signed up. We still need about 25 people so if you can help please go to [www.ctares.org](http://www.ctares.org) and see the instructions for signing up.

This week's topic is the Incident Command System (ICS). We need to be aware of a number of terms that are unique to ICS. This e-mail will help you, as will the briefing and briefing papers you will receive at the ARES® Staging Area for TOPOFF.

A number of people have pointed out significant errors in the first Weekly Bulletin #7 - Incident Command System. This correction clarifies many significant points and fixes several definitions. Please delete the old Weekly Bulletin #7 and read this one instead. As part of ICS, we are under the logistics function. We would likely be considered a "Section" in ICS, so for the sake of our correct discussions, AB1CR (ARES® SEC) would be the ARES® Communication Section Chief. Hank, KA1WTS (ARES® DEC for the affected area), would be Deputy ARES® Communications Section Chief.

The Incident Command System (ICS) was created many years ago as a result of firefighter deaths due to their leadership not realizing where they were. ICS provides two very important



things: (1) A management structure that emphasizes who is in charge of the overall incident and each major function and (2) accountability for all people and other resources at all times. All Police, Fire, and Emergency Medical Services are required by the Federal Government to use ICS. ICS is a large part of the Federal Department of Homeland Security's National Incident Management System (NIMS). For TOPOFF not only are the responding agencies using ICS and NIMS, but CT ARES® is also operating under the Incident Command System. The Incident Command System is flexible, allowing CT ARES® to select and implement only those functions that are appropriate. While we are operating as Red Cross volunteers and CT Office of Emergency Management volunteers, we are responsible for our own organization, planning, and accountability. That is why we have adopted the Incident Command System, as have other ARES® organizations.

There are several core ICS Functions:

**Incident Command** - Sets the incident objectives, strategies, and priorities and has overall responsibility for the incident or event. (There is only one Incident Commander for the entire incident. Command will likely pass from local to state to federal throughout the course of the event.)

**Operations** - Conducts tactical operations to carry out the plan. Develops the tactical objectives and organization, and directs all tactical resources. (Operations is the people doing the work. Paramedics, Firefighters, Police and others.)

**Planning** - Prepares and documents the Incident Action Plan to accomplish the objectives, evaluates information, maintains resource status, and maintains documentation for the incident. (Planning is done in order to provide operations clear objectives.)

**Logistics** - Provides support, resources, and all other services needed to meet the operational objectives. (Logistics includes feeding and other care for those responding to the incident. This is where the Red Cross comes in. Communications is also considered a logistical function, so if we were operating at the direct request of the Operations team we would still be in the Logistics function.)

**Finance/Administration** - Monitors costs related to the incident. Provides accounting, time recording and cost analysis. (We will not be directly affected by this at TOPOFF except for the need to keep good records.)

There are several important definitions dealing with ICS Organizational Components:

**Task Forces** - A combination of mixed resources with common communications operating under the direct supervision of a Task Leader. An example would be a team made up of firefighters, paramedics and police officers.

**Strike Teams** - A set number of resources of the same kind and type with common communications operating under the direct supervision of a Strike Team Leader. An example would be the four firefighters assigned to one fire truck, operating under the command of their Officer in Charge of the truck.

**Single Resources** - May be individuals, a piece of equipment and its personnel component, or a crew or team of individuals with an identified supervisor that can be used at an incident. This is the category we will most often be in.

These definitions are for the front-line of the incident. While we could apply some of this

terminology to what we do, it is really not meant to be used in that way. (If we were tasked to provide communications for a Fire Fighter and Paramedic who were working together then we would be part of their task force.)

As an incident grows, the Incident Commander may delegate authority for performance of certain activities such as: Public Information Officer, Safety Officer and/or Liaison Officer, among others.

TOPOFF will be operated under what is known as Unified Command. Unified Command is the way that each agency can continue to work within their procedures, while coordination happens at a higher level. This basically means that there are many organizations involved, but that they are all operating under the leadership of the Joint Field Office (JFO). The JFO is made up of representatives from each agency involved in responding to the situation. As is commonly done in a large situation there will also be a Joint Information Center (JIC) where the media receive information about the event.

While there are many other components to the Incident Command System, this note describes the key roles, activities, and terminology. You will likely encounter terminology you have not heard before. Remember it is far better to ask for clarification than to send a message that is incorrect! All of our messages, whether NTS Formal or Tactical should start with a “to” description of a person at a place, and end with a signature of a person at a place. For example, a message might be to Martha Smith, Mass Care Manager for Station 2 and from John Jones, Disaster Coordinator Red Cross New London Chapter. This type of information will assure that messages get to the right people and that those people know who made the request or sent the information. Please remember that you should write down all messages before you tell Net Control you need to send a message, and the receiving party should write down the message as it is received, prior to delivering it. These steps may take an additional minute or two, but the accuracy is well worth the delay, and we are not handling life-or-death messages.

More information on the Incident Command System is available through the Department of Homeland Security (see the training matrix at [www.ctares.org](http://www.ctares.org) - click on Training). Also, a narrated PowerPoint presentation with more information will be posted to the CT ARES® web site soon.

Thanks to all who have volunteered for TOPOFF, and for any who want to volunteer - please let me know!

Thanks and 73,  
Chuck AB1CR

Chuck Rexroad  
AB1CR  
Section Emergency Coordinator  
Connecticut Section  
Amateur Radio Emergency Service (ARES®)  
A Program of the ARRL

## 5.2 Recon Rally and Scavenger Hunt



**Who:** CT ARES® Rapid Response Teams (RRTs)

**What:** Recon Rally ~ CT ARES® Area 4 South

**When:** Saturday, 5 March 2005, 0845-1430

**Where:** Area 4 South ~ New London County

**How:** Area Familiarization & Scavenger Hunt

**Why:** EmComm Prep for TOPOFF3 & Have Fun!!

### Schedule of Events

0845-0925 ~ Assemble & Register at Area 4 Marshalling Center\*

0930-1015 ~ EmComm Area 4 Familiarization Briefing

1030-1230 ~ "Scavenger Hunt" at Area 4 S "Sites of Interest"

1230-1245 ~ Reassemble at Area 4 Marshalling Center\*

1300-1330 ~ Review and Critique Event - Award Prizes!

1330-1430 ~ Bring Your Own Brown Bag Lunch (BYOBBL)

\*Chesterfield Firehouse, Oakdale - Route 85/Chesterfield Rd

### FAQs

Q. What do I need to participate in the Scavenger Hunt?

A. An RRT of two (or three) people and a vehicle with 2-meter mobile radio. Computer-printed maps will be provided. If you are a member of AAA, get their New London map!

Q. How long will it take to visit all the sites? And what if I get lost??

A. Planning and time management to maximize effectiveness are important. The whole tour can be done in an hour -- you have a maximum of two hours. The winner is the team with best score in under the two-hour limit -- tiebreaker for same score is the faster time. If you get lost, use your radio to call Net Control for help -- just like during a real event!

Q. I don't have a GPS -- does that matter?

A. Good map work and using the clues given are all that is needed to complete the Scavenger Hunt -- having a GPS is a bonus -- having APRS is a real plus!

**Recon Rally Prep ~ CT ARES® Area 4 S ~ Friday, 4 March 2005**

↔ ↔

**1430-1600 ~ Area 4 Marshalling Center Set-up**

- Laptop/Video Projector - Location/Power
- Coffee Pot & Supplies & Refreshments - Location/Power/Trash
- Setup Location/Power for & NCS Radios/Antennas
- Setup Location for Intake/Assignments/???
- Usefulness of White Board for Status Board - Magnetic?

↔ ↔

**1730 ~ Load Truck for Saturday!**

- Diamond X-50A Antenna; Tripod & T-Base; 10 ft Mast; 3x5 ft Mast Sections
- SONY Laptop (cords & case) & Video Projector (case & cords & remote)
- Canon Digital Rebel (case & cables & lenses)

↔ ↔

**1830 ~ Final Preps for Saturday!**

- Finalize PowerPoint Briefing; Load onto both PC Laptops!

↔ ↔

**0700 ~ Just-in-Time Items for Saturday!**

- HP Laptop (cords & case); PowerBook (cords & case)
- USB Flash Drives - Both 512 & 256!!

↔ ↔

**Recon Rally ~ CT ARES® Area 4 S ~ Saturday, 5 March 2005**

↔ ↔

**0715-0845 ~ Area 4 Marshalling Center Set-up**

- Pickup Donuts! Coffee/Pot/Cream/Sugar/Cups/Stirrers (BIG Go Box)
- Setup Laptop/Projector/Screen & NCS Radios/Antennas

↔ ↔

**0845-0925 ~ Assemble & Register at Area 4 Marshalling Center**

- Intake - Complete Individual Registration Forms & Issue Special Event ID's
- Assignments - Register Recon Teams (prefer groups of two or three)
- Issue Area Familiarization Guide (Maps/Locations/Repeaters/FreqPlan)
- Distribute "Loaner" APRS Mobile Radios/GPS/Power???

↔ ↔

0930-1015 ~ EmComm Area 4 Familiarization Briefing

- Laptop/Projector/Screen/PowerPoint Presentation – Extra Copies of Map3
- Issue Scavenger Hunt Envelopes/Clues & Provide Final Instructions

↔ ↔

1030-1230 ~ “Scavenger Hunt” at Area 4 South “Sites of Interest”

- “Check-out RRTs” as they depart the Marshalling Center
- Serve as NCS on Rally Net (147.06) / NTS Messages to KB1HHN?
- Monitor Portable APRS Station – D7 or D700/Ant/Laptop/Projector

↔ ↔

1230-1245 ~ Reassemble at Area 4 Marshalling Center\*

- “Check-in RRTs” as they arrive at the Marshalling Center
- Collect & Score Scavenger Hunt Quiz Answers

↔ ↔

1300-1330 ~ Review and Critique Event – Award Door Prizes!

- Prizes – Digital Multi-meter / Suction Clamp & RF connectors

↔ ↔

1330-1430 ~ Bring Your Own Brown Bag Lunch (BYOBBL)

- Eat lunch – general chitchat - and just hang out and relax!
- Clean up Marshalling Center area (blue tub & garbage bags)

↔ ↔

1430-1630 ~ TOPOFF Meeting – Chuck/Brian/Hank/Wayne!

- Planning/Preparation/Recruiting/Organization/Support/etc

Additional Information Available

CT ARES® Area 4 Download Page ~ <http://homepage.mac.com/tahoekid/RRG&EOP.html>

Or contact Wayne Gronlund at [N1CLV@aol.com](mailto:N1CLV@aol.com)



Featured in [Military](#)

## Scavenger Hunt Will Help Radio Operators Prepare For Terror Drill

By [ROBERT A. HAMILTON](#)

*Day Staff Writer, Navy/Defense/Electric Boat*

Published on 3/4/2005

Amateur radio operators will take part in a scavenger hunt this weekend, seeking information rather than hub caps or cowboy hats, in an exercise designed to get them acquainted with Southeastern Connecticut before a major emergency drill next month.

Wayne Gronlund, who is coordinating the event, said he is trying to put together at least 50 amateur radio enthusiasts for TOPFF, a weeklong exercise that will include simulated terrorist attacks on ports in New London, New Jersey, Canada and the United Kingdom.

“We know we're not going to have enough amateur radio resources in New London County to provide all the support needed, so we'll be calling people from all over Connecticut, and possibly Massachusetts and Rhode Island,” said Gronlund, a retired Coast Guard captain and assistant district emergency coordinator for the Amateur Radio Emergency Service or ARES.

“Using a scavenger hunt as a mechanism, we'll send them around New London County to find key areas where they might end up providing support — or places they might have to stay away from because something is happening there,” Gronlund said. “The intent is to have fun, but also to get them familiar with the area.”

He said he hopes to bring in 20 to 25 teams of two or three people who will shuttle around the region in a car equipped with a mobile VHF-FM radio looking for 12 sites based on photographic clues and maps that they will be issued.

For instance, one of the clues directs them to a sign, and their assignment is to come up with the name inscribed on the building behind the sign.

TOPOFF, which stands for Top Officials, will take place April 4-10, involve up to 10,000 people and cost an estimated \$16 million. It is the third drill of its kind, following one in Denver and Portsmouth, N.H., five years ago, and another in Chicago and Seattle last year. Details of the simulated attack are not being released.

Gronlund said TOPOFF officials have told him they will need about 25 radio operators at the peak of the exercise, but because they will be working in shifts, he will need at least 50,

and would like to have 75.

Gronlund said there are between 800 and 1,000 radio operators licensed in New London County, but only about 40 have registered with ARES, "so even all of them would not be enough, and a good number of them are not going to be available because most of the exercise will take place during the work week."

So in addition to appealing to local radio operators who are not part of ARES — including seven juniors at the U.S. Coast Guard Academy who just passed their Federal Communications Commission license examination — he has issued an appeal throughout the tri-state area for volunteers.

Gronlund said the work in TOPOFF will primarily involve coordinating communications for the Red Cross emergency relief efforts, "But we would be in a position to provide communications to any agency that needed it."

Emergency responders often use cell phones, he said, but after the terrorist attacks of Sept. 11, 2001, the cell phone network quickly became clogged through overuse.

Though the phone companies have gotten better at prioritizing calls, Gronlund said, "The bottom line is, when all else fails, you can fall back on emergency radio."

The teams will register between 8:45 and 9:25 a.m. on Saturday at the Chesterfield Firehouse in the Oakdale section of Montville, undergo a briefing until 10:15 a.m., and then depart on the scavenger hunt at 10:30. Gronlund said someone familiar with the area could probably find all 12 sites on the route in about an hour, but the organizers have set a two-hour maximum for completing the tasks.

The team that answers most of the questions correctly wins, and in the event of a tie the contest goes to the team with the lowest time.

"Whoever has the best score gets bragging rights only — we're not giving out any prizes," Gronlund said. And the teams will be warned: no speeding.

"We are not first responders," Gronlund said. "We provide communications support, so there's no expectation for them to be anything but John Q. Citizen traveling between point A and point B." ■

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For home delivery, please call 1-800-542-3354 Ext. 4700

### 5.3 Briefing Sheet

#### **ARES® - TOPOFF 3 - BRIEFING INFORMATION**

- Report to the ARES® Marshalling Center (Chesterfield Firehouse) at least 90 minutes before your scheduled assignment. You will be issued a vest and credentials. You must return to the Marshalling Center at the end of your assignment to check out and return the vest and credentials. This procedure will be followed for each day that you work.
  - The ARES® Marshalling Center for the drill will be the Chesterfield Firehouse, Oakdale - 1606 Route 85 at Chesterfield Rd and Grassy Hill Rd (also known as New London Turnpike in Oakdale by some mapping software). The GPS coordinates are 41-25.76N 072-13.08W.
  
- Make sure you have the following with you:
  - Driver's License
  - Amateur Radio License (copy OK)
  - Medications for at least 2 days
  - Food and water
  - Emergency contact information (see attached form and instructions)
  - Pads and pens
  - Radio/antenna equipment you will need – program radios per Area 4 TOPOFF Frequency Plan
  - Earphones/headphones
  - Spare batteries
  - Lights for night work
  - Name/call sign on everything
  - Duct tape
  
- Safety Considerations
  - Look up when putting up antennas
  - Duct tape cords and cables
  - All wiring must be neat and secure, not blocking airbags or access
  - Fuse near batteries (gel cell, etc.)
  - Evacuate immediately when told to – only ask in what direction you should go
  - Know where you are review maps and land marks
  - Pocket knife or Leatherman-type tool is ok, but NO weapons
  
- General
  - Know to whom you report
  - Follow orders of on-scene commander
  - Keep good records – messages sent to and from, date and time
  - We will not be working in the “Hot zone”
  - Red Card - Also known as Injects - These are literally red cards that the event coordinators can hand to a person at any time. They range from, “all phones just died,” to “you just died,” to “you just broke your leg,” and other things. If someone hands you a Red Card that says “you just died,” ask them if they mean you or your radio. While they will



likely insist it is you who died, it will get them thinking about the fact that we have very resilient communications (and most of us have an old spare HT in our bag).

- Because TOPOFF 3 is a special security area, all persons and packages may be subject to search and inspection. For that reason, do not bring cameras, alcohol, firearms, large knives or anything else that could create an incident and embarrass either you or ARES®. Expect to be subject to search.
  - Dress Code - Dress in casual attire with closed toed shoes/boots or sturdy sneakers. Acceptable wear includes khakis and nice jeans. Dress in layers for all possible springtime temperatures. Remember, you are representing the American Red Cross, Amateur Radio Emergency Service, and Amateur radio in general.
  - Media - As in any situation, when approached by the media refer them to the nearest public affairs person or your supervisor. We plan to provide you brochures you can hand to the media and say "all the information to get in touch with our Public Affairs team is in here."
  - Sleeping arrangements are that the Chesterfield Fire Station has agreed to let us sleep overnight on their floor. Bring a cot, air mattress, or whatever you need if you plan to spend the night at the Fire Station.
  - Food will be provided by the Red Cross while you are on duty. There is a small gas station and sandwich shop just down the street from the ARES® Marshalling Center. Coffee will be provided for free in the Marshalling Center. Everything else is pay as you go.
  - **\*\*All ARC operations will cease when a message is received stating "STOP TOPOFF PLAY, STOP TOPOFF PLAY" This will be our internal code for everyone to stop operations if something happens for real. The order to stop play will only come from operations management personnel.\*\***
  - **\*\* The following emergency alerting system will be used:**
    - Evacuate - 5 long blasts
    - Cease Operations - 1 long blast (10 seconds duration)
    - Resume Operations - One Long and One Short blast**\*\***
- Nets
    - Sync your time piece to WWV or at Net Control prior to assignment
    - Command Net – for leadership only
    - Resource Nets –
      - Statewide KB1AEV Linked system – 147.345 + PL 77 – **Check in before leaving your QTH**
      - Local W1AAA/R – 147.060 + PL 156.7
    - Logistics – for dispatching supplies, etc.
    - No Health and Welfare net is anticipated
    - Net Control Station (NCS) is boss
      - All communications will be directed by and to the NCS
      - If directed to go to another net – go without questions
    - Use tactical call signs

- Think before keying up
- Listen to traffic on the net – you might be called, so pay attention
- No names over the air
- Stay calm
- Be patient
- Be polite
- If ordered to – stop transmitting – obey all lawful orders
  
- Traffic
  - All of ours will be “Test Routine”
  - Emergency and Priority are reserved for actual situations only
  - Remember to say “This is a drill”
  
- Emergency Contact Information

Fill out the form on the next page and put it into a sealed envelope. This envelope will be held at the ARES® Marshalling Center and returned to you unopened at the end of your participation, unless you are personally involved in an incident and the information is needed.

- Write your name, call sign, and ARES® Area number on the envelope.

**EMERGENCY INFORMATION**  
**for Amateur Radio Operator: \_\_\_\_\_ (FCC Callsign)**

Name	Address	Town	Phone Number

Cell	Work	E-mail

Automobile Year	Type	License number

**Medical Info (optional)**

Medical History	Medications	Allergies

Do you live alone (Yes / No)

Neighbor's name and phone numbers

--	--	--	--

Do you have any pets? List types and their names


Vet's Name and phone Number

--	--	--	--

**1<sup>st</sup> Contact**

Name	Address	Town	Phone Number

Cell	Work	E-mail

**2<sup>nd</sup> Contact**

Name	Address	Town	Phone Number

Cell	Work	E-mail

**Out-of-State Contact**

Name	Address	Town & State	Phone Number

Cell	Work	E-mail

## 5.4 Comms Plan

### CT ARES® Communications Plan for TOPOFF 3

In support of the TOPOFF 3 Exercise, the Connecticut Amateur Radio Emergency Service® (CT ARES®) will provide communications support to its served agencies – primarily the American Red Cross and the Connecticut Department of Emergency Management and Homeland Security. This communications support will be in accordance with the ARES® Area 4 Emergency Operations Plan (EOP) and the CT ARES® TOPOFF 3 Exercise Frequency Plan (passed separately).

Please note the following amplifying information:

When ARES® members participating in TOPOFF depart home/work enroute the Area 4 Marshalling Center (Chesterfield Firehouse, 1606 Route 85, Oakdale, CT), you are requested to advise the Statewide Resource Net Control Station (NCS) of your estimated time of arrival (ETA) via the Linked Repeater System (147.345+, PL 77.0, KB1AEV/R – other linked repeater – or via Echolink (Node 147345). Please plan to arrive at the Area 4 Marshalling Center not later than one hour before the start time of your designated shift.

When you are within range of the Area 4 Local Resource Net repeater (147.06+, PL 156.7, W1AAA/R, Salem), advise NCS of your updated ETA and obtain any talk-in information needed.

When you arrive at the Marshalling Center, park in the rear lot and enter the building at the designated center doorway (look for the ARES® sign). ARES® members will then complete your TOPOFF check-in process and be given your specific assignment information. You will be issued an ARES® vest, exercise credentials, etc (as needed) and be briefed on the exercise and your duties.

When you arrive at your assigned served agency location, you should check into the Area 4 Tactical Net (146.97-, PL 156.7, W1NLC/R, Waterford) using your assigned tactical call sign and obtain any further instructions from the Tactical NCS.

When your assigned shift has been completed and you have been properly relieved by the oncoming operator (as appropriate), report that to the Tactical NCS. Then you **MUST** return to the Area 4 Marshalling Center (Chesterfield Firehouse) to checkout, return your vest, etc – this is VERY, VERY important!

Chuck Rexroad, AB1CR, Section Emergency Coordinator

## 5.5 Frequency Plan

### Connecticut ARES® - TOPOFF 3 - Exercise Frequency Plan

Exercise Nets	Primary / Normal	Secondary / Backup	Tertiary / Simplex
Area 4 Tactical Net	"ALPHA" 146.970 MHz W1NLC/R - 600 kHz / 156.7 Hz / Waterford	"BRAVO" 146.670 MHz W1NLC/R - 600 kHz / 156.7 Hz / Groton	"CHARLIE" 146.565 MHz
Area 4 Marshalling Center Talk-in / Local Resource Net	"DELTA" 147.060 MHz W1AAA/R + 600 kHz / 156.7 Hz / Salem	"ECHO" & ECHOLINK 147.345 MHz KB1AEV/R + 600 kHz / 77.0 Hz / Statewide	"FOXTROT" 146.550 MHz
Statewide Resource & Enroute Tracking Net	"ECHO" & ECHOLINK 147.345 MHz KB1AEV/R + 600 kHz / 77.0 Hz / Statewide	"ECHO" & ECHOLINK 442.600 MHz KB1AEV/R + 5.0 MHz / 77.0 Hz / Statewide	"HOTEL" H1 = 3.965 MHz LSB H2 = 7.280 MHz LSB
<i>Out-of-Area Liaison</i> ARES® Areas 3 & 5	"GOLF" 147.090 MHz W1EDH/R + 600 kHz / 110.9 Hz / Glastonbury	"ECHO" 147.345 MHz KB1AEV/R + 600 kHz / 77.0 Hz / Statewide	"HOTEL" H1 = 3.965 MHz LSB H2 = 7.280 MHz LSB
<i>Out-of-Area Liaison</i> ARES® Areas 2 & 1	"INDIA" 145.290 MHz W1BCG/R - 600 kHz / 110.9 Hz / Killingworth	"ECHO" 147.345 MHz KB1AEV/R + 600 kHz / 77.0 Hz / Statewide	"HOTEL" H1 = 3.965 MHz LSB H2 = 7.280 MHz LSB
<i>Area 4 Packet Net</i>	"JULIET" 145.030 MHz N1NW-7	"KILO" 145.090 MHz W1EDH	"LIMA" 145.010 MHz W1GTT-10
<i>Area 4 APRS Net</i>	"MIKE" 144.390 MHz	"NOVEMBER" 147.460 MHz	"MIKE" 144.390 MHz
<i>Area 4 Traffic (H&amp;W) Net</i>	"OSCAR" 146.730 MHz N1NW/R - 600 kHz / 156.7 Hz / Norwich	"BRAVO" 146.670 MHz W1NLC/R - 600 kHz / 156.7 Hz / Groton	"PAPA" 146.580 MHz
<i>ARES® Command Net</i> SEC / DEC / ADEC / NCS	"QUEBEC" Frequency TBD	"ROMEO" Frequency TBD	"SIERRA" Freq TBD

Here are the recommended Command Net frequencies:

"QUEBEC" 446.875 MHz K1IKE/R (-5.0 MHz / 156.7 Hz / Salem) (Clue: Quebec = QB = Quarterback)  
(Note: This is Joe's temporary repeater that is not published anywhere - most "secure" of the lot)

"ROMEO" 145.390 MHz W1AAA/R (-600 kHz / 156.7 Hz / Ledyard)  
(Good local area 2 meter repeater - normally not used very much)

"SIERRA-1" 53.410 MHz K1IKE/R (-1.0 MHz / 156.7 Hz / Oakdale) (Clue: Sierra = Six Meters)  
(Located on Chapel Hill very near our designated NCS Simplex site - and hence close to Chesterfield FD)

"SIERRA-2" 53.850 MHz W1NLC/R (-1.0 MHz / 156.7 Hz / New London)  
(Located on top of L&M Hospital - has emergency power)

"TANGO" 448.975 MHz W1NLC/R (-5.0 MHz / 156.7 Hz / Waterford)  
(Located on same water tower as 146.97 Tactical Net - has emergency power)

We are getting 12 commercial UHF Trunked radios for our command net. These will be issued out to people as listed below. We still need to make sure we have the ham radio command net frequencies programmed into our radios as there is no guarantee the commercial system will not become overloaded.

I propose the following protocol for using the command net, whether commercial radios or ham frequencies. Chuck this is Dave, Chuck this is Dave. By using first names we'll know what radio to pick up. By repeating it twice it will get our attention since the radio will be silent most of the time (I hope). If on commercial radio we will end with Dave clear. If on ham radio we will end with K1DAV clear.

## **5.6 Public Relations Materials**

The materials on the following pages were produced by the Connecticut Amateur Radio Emergency Service® (ARES®) and the American Radio Relay League (ARRL) as part of the TOPOFF 3 Public Relations effort. The first item is a tri-fold brochure describing ARES® and other related programs and their relationship to the TOPOFF exercise. Following that are three ARRL web articles about ARES® and TOPOFF 3. These materials are copyrighted by the American Radio Relay League and are used with permission.



Each year hundreds of thousands of Americans volunteer their time and energies for the improvement and safety of their communities. Mechanics turn into firefighters when the alarm sounds. Hairdressers become EMT's . Engineers turn into auxiliary police.

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

**And thousands of them are  
“Hams!”**

**There are over 100 Amateur Radio operators participating in the TOPOFF 3 exercise, working behind the scenes with the Red Cross and the Connecticut State Office of Emergency Management. Look for the people in the orange Radio Communications vests.**

The Amateur Radio Emergency Service® is a national, voluntary organization of FCC licensed Amateur Radio operators, often called "Hams", who provide emergency communications and are organized through the ARRL, the national organization for Amateur Radio. This group has provided free emergency radio communications services for everything from shipwrecks to the disaster of 9-11. It is a specialized field requiring training and federal licensing.

The **SKYWARN** program provides critical ground observations to the National Weather Service in storms.

The **National Traffic Service** has provided long distance emergency communication and free radiograms for families, servicemen and victims for decades.

The **Red Cross** uses ARES to provide emergency communications in a disaster. So do the **Salvation Army, OEM, FEMA**, and hundreds of county and municipal governments.

**DHS –Citizen Corps and ARES** have a formal affiliation to provide training education and support to first responders and disaster relief organizations.

Additional agreements include the Salvation Army, Association of Public Safety Communications Officials, National Communications System, Volunteer Organizations Active in Disasters and many state and local emergency organizations.

In the hours immediately after the World Trade Center was destroyed and cell phones were useless, ARES provided the critical early communications.

When the hurricanes of 2004 destroyed infrastructures and whole communities in Florida, ARES' hams provided efficient communications and helped coordinate responding agencies.

In December 2004, when the tsunami struck, once again it was the hams who were the only systems still functioning in the disaster areas.

Because each radio station is fully self sufficient and can function independently, the volunteer ham radio operators still can talk to each other when other systems may fail or are overloaded.

**The ARRL Connecticut Section Emergency Coordinator in charge of the hams for this drill is Chuck Rexroad. His federal call sign is AB1CR and his cellphone is 860 712 6431.**



**For better or worse,**

Emergency Planning has become an important part of our society. Each of us is being asked to develop the abilities to help ourselves and others in a disaster.

Even if they still function, normal communications, phones and email based systems become overwhelmed in a crisis.

In such times, good radio communication is priceless. It saves time and lives by reliably getting the message through.

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- When there is no fax machine
- The internet is gone
- The “trunk line” is jammed
- And the cell phone is dead

**ARES members receive ongoing training through FEMA, Red Cross, Citizen Corps and the Amateur Radio Emergency Communications Courses funded by The Corporation for National and Community Service and United Technologies Corporation.**

Want to know more about **ARES ?**

Detailed information is available at:  
[www.arrl.org](http://www.arrl.org)  
and  
<http://www.arrl.org/FandES/field/pscm/sec1-ch1.html>

Or call:  
ARRL  
Newington, CT  
(860) 594-0265

**OR**  
**during TOPOFF 3**  
*April 3,4,5*

Representatives are at the Radisson, New London for TOPOFF 3. Look for the people with the red nametags.

*Attach business card here  
For Allen & Mary*

**Cellphone 860-798 9478**

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Which matches  
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Emergency  
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**when all else fails  
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## Amateur Radio to Have Role in Largest-Ever Mass Casualty Exercise

NEWINGTON, CT, Mar 21, 2005--Amateur Radio Emergency Service (ARES) members in Connecticut, New Jersey and several other states in the Northeastern US are preparing to take part in what's being characterized as the most comprehensive terrorism response exercise ever conducted in the US. Sponsored by the US Department of Homeland Security and intended as a realistic test of the nation's homeland security system, the exercise-- TOPOFF 3 --gets under way Monday, April 4, and continues through the week. ARES primarily will support the American Red Cross--the only nongovernmental organization with a formal role in the recently released National Disaster Plan. The Red Cross has main responsibility for mass care under the plan. Connecticut Section Emergency Coordinator Chuck Rexroad, AB1CR, is in the process of lining up the 100 or so volunteers he estimates will be needed in the region for the mass casualty drill.

"We're still looking for volunteers in all four types of positions needed," Rexroad told ARRL. "People who can staff a permanent position, people who can set up a temporary position, people who can do shadowing and--the big one we're missing right now--people who can temporarily put a radio in a mobile Red Cross van."

The TOPOFF 3 scenario will depict a complex terrorist campaign beginning in Connecticut and New Jersey and leading to national and international response that will include Canada, where the exercise will be known as "TRIPLE PLAY," and the United Kingdom, where it will be called "ATLANTIC BLUE." Rexroad anticipates that ARES will be providing its traditional "backbone" communication support among Red Cross mobile feeding stations, the organization's temporary stationary facilities and other Red Cross units. ARES also will be ready to provide back-up communication support the Connecticut Office of Emergency Management, he said.

Connecticut Section Manager Betsey Doane, K1EIC, and Rexroad have been preparing for this drill for more than a year, and both hope the ARES role in TOPOFF 3 will provide an opportunity for graduates of the ARRL Amateur Radio Emergency Communications courses to put into practice what they've learned--on a national stage.

While governmental agencies will comprise the majority of those taking part in TOPOFF 3, Amateur Radio's cooperation with and assistance to Red Cross will be under scrutiny, Rexroad says. "We've been assigned evaluators and judges who will be watching what we do and how we do it to determine our suitability for such things in the future," he explained. Rexroad says ARES participation in an exercise of this scale is an opportunity for the Amateur Service to put on display what it does best. At the TOPOFF2 exercise a couple of years ago, he noted, evaluators pointed to massive communication problems that Amateur Radio could have helped to resolve, Rexroad said. "So we do hope that this will show that we are very relevant in responding to a disaster situation."

A participant in the post-September 11, 2001, response at the Pentagon, Rexroad said cellular telephones and other conventional communication systems broke down there for

about one week, and Amateur Radio proved to be the sole means to support The Salvation Army's on-site communications. At last report, Rexroad had commitments from nearly three-quarters of the necessary volunteers. "The sections surrounding Connecticut have all offered to provide assistance, and we're looking forward to support from Eastern and Western Massachusetts, Rhode Island and possibly even some people from New York," Rexroad said. "We're definitely looking forward to that support from out-of-section."

TOPOFF 3 ARES volunteers will need to be comfortable with a high-security environment, realistic-looking "injuries" and military aircraft flying overhead, Rexroad says. In terms of equipment, he says most operation will take place on VHF and UHF, with an HF link to the National Traffic System only. He said handheld transceivers are acceptable, but he highly recommends headsets to contend with a potentially noisy environment. Volunteers will wear matching vests that say "Radio Communications" on the back and "ARES" on the front.

Due to security requirements, all volunteers *must register* with ARES in advance of the exercise. Prospective volunteers should contact Rexroad directly for additional information on how to sign up. "We appreciate all the help and support we can get!" he says. Information on the exercise and how to volunteer is on the Connecticut ARES Web site.

## *This is a Drill!* ARES Supporting Red Cross Participation in TOPOFF3



**Connecticut SEC  
Chuck Rexroad,  
AB1CR.**

NEWINGTON, CT, Apr 4, 2005--*There's been an explosion in New London! The drill is on! The drill is on!* Those words via a VHF tactical net shortly before 1:30 PM local time April 4 alerted Connecticut Amateur Radio Emergency Service (ARES) volunteers that TOPOFF 3 was under way there. Connecticut ARRL Section officials and ARES members have been preparing for the congressionally mandated exercise for about a year. The TOPOFF 3 scenario depicts a complex terrorist campaign that began earlier in the day in New Jersey--the other state serving at a TOPOFF3 site--with an apparent biological attack and eventually expands to an international scale. Some 150 ARES members from Connecticut and other states in the Northeast are on hand to support the American Red Cross, which has the main responsibility for

mass care under the National Disaster Plan. ARRL Connecticut Section Emergency Coordinator Chuck Rexroad, AB1CR, says part of the drill is to expect the unexpected.

"Anything can happen," said Rexroad, who--along with ARRL Connecticut Section Manager Betsey Doane, K1EIC--was among those staffing an ARES marshaling or staging area at the Chesterfield Fire Station, not far from New London. "They have what they call 'red cards' that can inject something unexpected into the drill," Rexroad continued. "They could tell us this building just went away that we're sitting in, and all the equipment is gone. We'd have to go somewhere else and start over."

Doane explained that such surprises may involve personnel as well. "Somebody might come up to one of us and say, 'You just broke your leg,' and we have to react to that."

Something unanticipated really did happen as activity was ramping up. With the Connecticut phase of the drill set to start in about an hour, a crucial VHF repeater went down. A backup soon was on its way to the site. Rexroad says a lot of redundancy was built in during the planning stages.



**This is a drill! Connecticut SM Betsey Doane, K1EIC, handles traffic from the ARES resource net.**

"Every piece of equipment has at least one backup, and most of them have two, because a lot of the equipment here is somewhat optional," Rexroad explained. The volunteers at the staging area had set up equipment for HF through UHF and included provisions for packet and APRS. Volunteers provided their own mobile transceivers and antennas for deployment to provide communication for Red Cross Emergency Response Vehicles (ERVs).

In addition to outfitting Red Cross ERVs with communications gear, volunteers are staffing fixed or temporary sites or shadowing Red Cross officials. ARES also will be ready to provide back-up communication support the Connecticut Office of Emergency Management, he said.

Rexroad says extensive training--including the ARRL Amateur Radio Emergency Communications courses--in the months and weeks leading up to TOPOFF3 has already paid off. "The Level 1 training is especially helpful, because it gives everyone a common base to work from," he said.



**Chris Poss, KB1FUO, explains the APRS setup to Emil Soderberg, KB1KMW, a staging area volunteer.**

Doane agreed. "I have seen people take the Level 1 course who were very experienced in communications National Traffic System (NTS), and they still learned something," she said. "Everyone is going to use their skills. I don't often go out on an ARES event--I've been an NTS operator for years--and this has been a wonderful opportunity to apply what I learned." The Connecticut Section also conducted its own extensive training for TOPOFF3, in part so volunteers would be familiar with the national incident management system and incident command system the drill and many

served agencies now employ. Several ARRL Headquarters staffers are among the ARES volunteers taking part in TOPOFF3 support for the Red Cross.

Sponsored by the US Department of Homeland Security and intended as a realistic test of the nation's homeland security system, TOPOFF3's goal is to push the system of first responders beyond their limits. Doane pointed out

that participants don't have all the details. "It's like an emergency, but it's unlike an emergency," she said, "because we have to plan, because we're being evaluated on this drill."



**Connecticut ARES Area 5 District Emergency Coordinator Dave Hyatt, K1DAV, has fresh information for volunteers Roddy McComber, KA1BSS (left), and Lee Schuett, KB1ETR.**

Rexroad says ARES doesn't know who the evaluators are. "They could be sitting out there with scanners right now," he said. "We don't know for sure."

He and Doane note that one of the conclusions from TOPOFF2--the last major exercise of this type--was that Amateur Radio should have been utilized after communications circuits had become saturated. "So this time, the Department of Homeland Security is looking at Amateur Radio and how we operate and how effective we are."

A participant in the post-September 11, 2001, response at the Pentagon, Rexroad said cellular telephones and other conventional communication systems broke down there for about one week, and Amateur Radio proved to be the sole means to support The Salvation Army's on-site communications.



**Connecticut SEC Chuck Rexroad, AB1CR, at the start of the TOPOFF 3 exercise.**

Rexroad and his crew at the staging site installed an HF dipole, and ARES plans to employ NTS HF circuits to send traffic to national Red Cross officials as well as to other ARRL Field Organization Personnel.

other ARRL Field Organization Personnel.

By late Monday, several hours into the drill, Rexroad reported that some 45 ARES volunteers had been deployed to the field to support the Red Cross. "We are their only communications," he noted.

## Amateur Radio's Role in TOPOFF 3 Draws Praise



**Connecticut SEC Chuck Rexroad, AB1CR, at the ARES marshaling center in Chesterfield, Connecticut--just outside the TOPOFF 3 "hot zone."**



**Connecticut SM Betsey Doane, K1EIC, responds to a call.**



**TOPOFF 3 started off with a bang in New London, Connecticut.**

NEWINGTON, CT, Apr 6, 2005--As the active, on-the-ground portion of the massive [TOPOFF 3](#) homeland security exercise winds down, Amateur Radio Emergency Service (ARES) volunteers in Connecticut are continuing their support of the American Red Cross. Sponsored by the US Department of Homeland Security and intended as a realistic test of the nation's homeland security system, TOPOFF 3's goal is to push the system of first responders beyond their limits to find the weak spots. ARRL Connecticut Section Emergency Coordinator Chuck Rexroad, AB1CR, said today that not only does he believe Amateur Radio has acquitted itself very well during the first three days of the drill, the American Red Cross apparently does as well.

"I got a note from the Red Cross disaster manager saying, 'You guys are doing a fantastic job, and we really appreciate everything you're doing,'" Rexroad reported. "We certainly were--and still are at this point--their only communications between all of their local feeding vehicles, their kitchen, their headquarters and anywhere else they want to communicate to."

Given main responsibility for mass care under the National Disaster Plan, the Red Cross called on Connecticut ARES to provide radio communication for TOPOFF 3. Rexroad says that while he hasn't compiled final statistics yet, ARES volunteers have been able to staff simultaneously 10 emergency response



**ARES volunteers staff a communications center at Red Cross Headquarters in New London.**



**Realism rules: TOPOFF 3 "victims" James Bond and Linda Kleinschmidt show off their "injuries" and explain how they were treated during a press briefing in New London, Connecticut.**



**[Click here](#) to see a TOPOFF 3 video clip featuring Connecticut SEC Chuck Rexroad, AB1CR**

vehicles, one logistical vehicle, four stationary locations and a net control station plus a couple of supplementary positions.

In all, as many as 40 of the 150 ARES volunteers from Connecticut and other states in the Northeast who turned out have been deployed to the field at any given time, and everyone got to take part at some point. "Everybody had a job to do," Rexroad said. "Everyone had at least one shift when they were able to get on the radio and provide communications support."

The Connecticut TOPOFF 3 began with a bang--an explosion in New London meant to simulate a terrorist attack. "Loud enough that the organizers passed out earplugs for the media gathered on the bluffs above," recounted ARRL Media and Public Relations Manager Allen Pitts, W1AGP--a former Connecticut SEC and current ARES member.

Visual realism was very much a part of the \$16 million exercise--the largest federal drill ever held, and prospective ARES volunteers were cautioned in advance. "As the mushroom cloud of smoke drifted away," Pitts said, describing the explosion's immediate aftermath, "hundreds of gory victims processed into the site to assume positions of death and agony." Pitts says Amateur Radio's real work only began in earnest after the media also drifted away, once the smoke and simulated blood were gone.

Connecticut Section Manager Betsey Doane, K1EIC, praised the professionalism the ARES ranks have demonstrated, and she credited the ARRL Amateur Radio Emergency Communications courses and other training with raising the overall level





[Click here](#) to see a TOPOFF 3 video clip featuring Connecticut SM Betsey Doane, K1EIC

of operating skill--even among newer operators.

"There were a few new people that were assigned to be observers, and before the end of the drill ended up trained well enough to be an operator on an ERV," she said. "I have to tell you, I was impressed, and I think I'm pretty critical about that, having done this for a long time."

TOPOFF 3 required those involved to be ready for unexpected events, and the ARES operation wasn't spared. "The only big curveball we got thrown was when one of the judges decided they were going to take one of our repeaters down, so we were told that would no longer be available to us," Rexroad explained. But Connecticut ARES was ready for such an eventuality and was able to switch to a backup repeater already written into its planning. Ironically, a genuine repeater breakdown occurred April 4, just before the exercise got under way.

Rexroad and Doane agreed that TOPOFF 3 has been a learning experience for ARES. "We learned a fair number of lessons, and most of them were organizational, not technical, in nature," Rexroad remarked. Citing an example, Doane said the ARES team refined its tracking procedure on the fly to make it work more smoothly.

"I think we were well-prepared, we tried to anticipate where the positions would be, tried to serve the American Red Cross, our main served agency who invited us, as well as we could in terms of complying with their needs," Doane commented. "I think we've done that. Anytime we asked for a resource, it came through. It was wonderful!"

Rexroad says Connecticut ARES also prepared to assist the Connecticut Office of Emergency Management and actually activated several of its stations to show the state officials that it had the back-up coverage in case they needed it. While ARES didn't handle any drill-related message traffic for OEM, they did pass voice and packet messages to demonstrate ARES' capability to do so.

A bioterrorism incident was the scenario in New Jersey--the only other TOPOFF 3 site. Emergency officials there not only were key to the exercise, they had real problems owing to flooding in the northern part of the state. ARES teams in New Jersey, New York and Pennsylvania participated in the flood emergency response and relief effort.

## High Praise for Amateur Radio Follows ARES' TOPOFF 3 Performance



**The ARES marshaling center in Chesterfield, Connecticut--just outside the TOPOFF 3 "hot zone."**

NEWINGTON, CT, Apr 8, 2005--The role of Amateur Radio Emergency Service (ARES) volunteers in Connecticut in this week's massive TOPOFF 3 exercise has drawn high praise from the American Red Cross, for which ARES provided virtually all radio communication. Sponsored by the US Department of Homeland Security and intended as a realistic test of the nation's homeland security system, TOPOFF 3's goal was to push the system of first responders beyond its limits to find the weak spots. American Red Cross emergency services director Mario J. Bruno extolled ARES' performance.



**Realism was the order of the day at the TOPOFF 3 "ground zero" site in New London.**

"Operators were there when we needed them, and messages got to where they were needed," he said in a note to ARRL Connecticut Section leadership. "We have learned a lot about what ARES can really do when things get messy, and TOPOFF 3 has been a clear example of how complicated a disaster can get."

Bruno said the Red Cross doesn't have to worry if today's fancy telecommunications devices fail, because ARES will always be there to provide the needed support.

"Thank you ARES for helping us respond to the largest disaster exercise in the history of the United States," Bruno concluded. "We will not forget."

The Connecticut TOPOFF 3 began April 4 with an explosion in New London meant to simulate a terrorist attack. Realism, including simulated injuries, blood and fatalities, was very much a part of the \$16 million exercise--the largest federal drill ever held. Prospective ARES volunteers were cautioned in advance, so they'd know what to expect.



**As simulated TV crews record the action, a TOPOFF 3 “victim” is transported to the hospital.**



**ARRL Connecticut Section Manager Betsey Doane, K1EIC (left), and Eastern Massachusetts SM Mike Neilsen, W1MPN, are interviewed by a newspaper reporter from Norwich.**

Brian Fernandez, K1BRF, a Connecticut Assistant SM and ARES liaison to the Red Cross said Amateur Radio's performance in TOPOFF 3 did not go unnoticed at the highest levels. “Amateur Radio made a major contribution to the nation,” he said, “and those who contribute to making it safer and stronger, and folks in the right places know it.”

After ARES stood down from the drill late on April 6, ARRL Connecticut Section Manager Betsey Doane, K1EIC, and SEC Chuck Rexroad, AB1CR--said they felt Amateur Radio acquitted itself very well during the drill.

“The energy, enthusiasm and absolute dedication of all the volunteers for this event are a testament to the real dedication and teamwork in the Connecticut Section,” Doane said in a statement thanking all who took part.

Rexroad agreed. “It's just been amazing,” he said. “People came into this drill prepared and ready to stay. It was a very positive experience.” Several, he pointed out, took time away from their jobs and families to volunteer for the drill.

Numbered among the ARES volunteers were several members of the ARRL Headquarters staff.

Under the National Disaster Plan, the Red Cross had primary responsibility for mass care. Rexroad said ARES provided the only communication among all of the Red Cross emergency response vehicles (ERVs), mobile canteens, kitchen, headquarters and other sites the organization had to stay in touch with during the drill.

As many as 40 of the 150 ARES volunteers from Connecticut and other states in the Northeast were deployed to the field at any given time, and each one got to take part at some point, Rexroad said. “Everyone had at least one shift when they were able to get on the radio and provide communications support.” Doane credited the ARRL Amateur Radio Emergency Communications courses and other training with raising the overall level of operating skill--even among

newcomers.

ARRL CEO David Sumner, K1ZZ, who monitored ARES net activity during the event, commended the high level of proficiency. “The level of professionalism and discipline was very impressive,” he said. “The benefits of the emphasis the ARRL has placed on training over the past several years were clearly evident.” Sumner this week also visited the ARES marshaling headquarters in Chesterfield, Connecticut, to congratulate some of the volunteers in person.

TOPOFF 3 called on participants to be ready for unexpected events, and the ARES operation was no exception. “The only big curveball we got thrown was when one of the judges decided they were going to take one of our repeaters down,” Rexroad explained. Connecticut ARES was able to promptly switch to a backup. During a staged “power failure” at unified command, only the ARES radio, equipped with battery backup, remained working. ARES promptly worked around a genuine repeater breakdown that occurred just before the exercise got under way.



**ARRL Connecticut SEC Chuck Rexroad, AB1CR (left), and TOPOFF 3 ARES Operations Manager and Area 4 District Emergency Coordinator Hank Wolcott, KA1WTS.**

Rexroad and Doane agreed that TOPOFF 3 not only was a success but a helpful learning experience for ARES. Doane allowed that there was a need to streamline things organizationally and to provide a mechanism to debrief volunteers returning from the field. “Feedback immediately after an event is important,” she said.

Rexroad says Connecticut ARES also prepared to assist the Connecticut Office of Emergency Management (OEM) and actually activated several of its stations to show state officials that it had the back-up coverage in case they needed it. In

anticipation of that possibility, he said, the OEM added a 2-meter antenna at its headquarters in Hartford so ARES would have VHF and UHF capabilities from there as well as from a communications center at an OEM location several miles away in Rocky Hill.

“I want to let everyone know how proud I am and how privileged I feel to work with such an outstanding group of people,” Rexroad said in a post-drill message to Connecticut ARES members “Everyone dealt with difficult situations professionally and positively, and we overcame hurdles wherever, whenever and whatever they were.”

Doane expressed her gratitude not only to Rexroad and Fernandez, but to Assistant SEC Rod Lane, N1FNE, TOPOFF 3 ARES Operations Manager and Area 4 District Emergency Coordinator Hank Wolcott, KA1WTS, her Section Cabinet, ARES leadership, ARRL headquarters staff and all who volunteered. She also thanked Eastern Massachusetts Section Manager Mike Neilsen, W1MPN, “and his dedicated, professional team” for their participation in TOPOFF 3. “This was a great example of how two ARRL sections can work together,” Doane said. “It was a real pleasure having them on board.”

A bioterrorism incident was the scenario in New Jersey--the only other TOPOFF 3 site. Emergency officials there not only were key to the exercise, they had genuine problems dealing with flooding in the northern part of the state.

## 5.7 Evaluation Form

### ARES® TOPOFF Evaluation Form

The CT ARES® Leadership Team is interested in your comments about this experience. Please complete this form and either hand it in at the end of your assignment or send it by email to [ablcr@arrl.net](mailto:ablcr@arrl.net). Thank you.

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Please use the following rating scale:

- 1 = excellent
- 2 = above average
- 3 = average
- 4 = fair
- 5 = unsatisfactory

Question	1	2	3	4	5
Clarity of e-mail messages before event					
Clarity of training materials on ICS and NIMS					
Clarity of briefing materials					
Experience at marshalling area Comments					

Question	1	2	3	4	5
Experience at Red Cross staging Comments					
Overall experience on assignment Comments					
Overall experience at TOPOFF Comments					

What went particularly well for you?

If you were leading this event, what would you have done differently?