

# Eastern MA ARES Simulated Emergency Test 2023 Scenario and Guidelines



## Eastern MA ARES

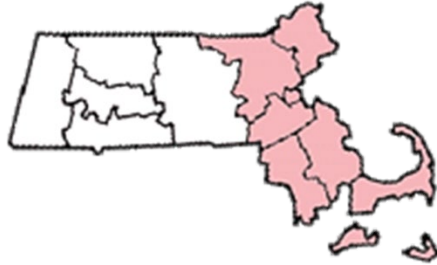
Section Exercise: **“Regional prep”**

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ARES staff

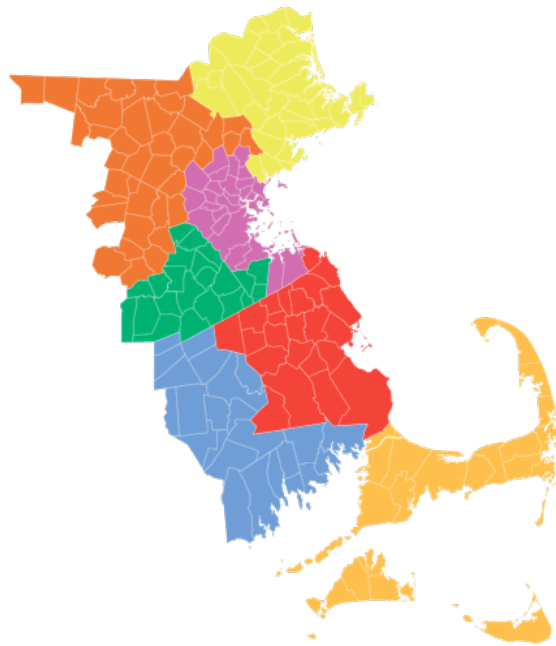
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## Eastern MA ARES Map



# Date and time of Exercise

Saturday November 11th, 2023

Setup time: 9:00am

Start Time: 10:00am

End Time: Noon

Operational Duration: 2 hours

## Purpose

The Eastern MA Section Amateur Radio Emergency Service will conduct an autumn operations exercise to test its capability in establishing communications with stations within its section and outside it under simulated emergency conditions. The operational exercise called **“Regional prep”** will test the ability of several home stations, EOCs, possible field sites and other stations to communicate. The exercise will attempt to build upon the lessons learned from our past operational exercises.

This exercise will be held on the same day as the National Winlink ETO (EmComm Training Organization) exercise.

# Scenario

The current world situation has caused great concern in most parts of the world. Ongoing wars that could widen along with potential terror attacks have caused local, state and federal authorities to take stock of their communications infrastructure and encourage the testing of those systems. The scenario for this exercise will be a generic test of these amateur radio systems and not a specific natural disaster as we often conduct.

# **ARES groups and simulated activities**

This exercise guideline is deliberately generic in nature. ARES groups are free to adapt this scenario and conduct their operations as needed for their groups. Feel free to use your home stations or mobiles for this purpose. It is likely that most of the operations involved in this exercise will utilize home stations.

## **Exercise Objectives**

The objectives of this exercise are as follows:

- Establish and conduct a tactical net on simplex 2m or FM repeater for your group
- Establish contact with any Town EOC RACES stations
- Establish contact with other ARES districts where possible
- Establish an HF 75m voice net for all of MA (and potentially other areas)
- Establish a 60m HF voice net for all of MA (and potentially other areas)
- Send requested ATIS VHF radio station reception information by voice
- Send ATIS (AM Mode) VHF radio station transcribed information by Winlink
- Check in and/or pass information on the MMRA repeater network with an added simplex component
- Check in and/or pass information the NEW-ENG3 9123 Echolink node
- Conduct an NTS NBEMS net on 75m and pass traffic
- Conduct an NTS voice net on 2m VHF FM
- Attempt operations with the RI section on VHF and/or HF
- Conduct a short 6m operations net on the Mt. Wachusetts 6m repeater

# Operational Ground Rules

## ARES/RACES

ARES/RACES/Auxcomm groups can fully adapt and change their individual plans to suit the needs of the local group.

## Message Handling

Message handling, on voice, will occur on 2 meters, 60m, 75m, Echolink and on HF.

## Setup and Timeline

Setup time will be 9am. The exercise will begin promptly at 10am. It will last approximately 2 hours and will end at Noon. Timelines may be adjusted accordingly in response to turnout and early completions of primary objectives.

## Exercise Disclaimers

Due to the proliferation of radio scanners and the possibility of misconstrued information by the public, all tactical voice messages *that can be misconstrued* will be preceded by the words **“This is a Drill”**. Any NTS formal messages will have the words **“This is a drill X”** as the first five words in the body text. In this time of national public concern, we must make all efforts to ensure that the general populace is not misled and that amateur radio is not portrayed in a negative manner. *If the messages are not considered to be able to be misconstrued, then the disclaimer will not be needed.*

## Exercise activities

There will be one primary operational activity in addition to optional NTS messaging. This will involve the gathering of specific information to pass by voice or Winlink.

# Monitoring and reporting which Aviation ATIS (Automatic Terminal Information Service) VHF radio stations

**Note:** ATIS broadcasts are in AM mode and NOT FM. Your receiver must be capable of receiving the AM Aircraft band in order to monitor.

The primary messaging activity for voice will be the monitoring and reporting on which VHF ATIS stations can be heard at your location. Operators will monitor the established VHF Aircraft radio band and determine which stations they can receive and how strong they are at the monitoring location. Operators will first list their own call signs and their locations. Then the operators will list the ATIS stations by **call sign** and whether the signal was “Good readable, weak readable or no signal” under the boxes for ATIS stations. Three boxes are provided assuming that most will not hear more than 3 stations. They will also state whether the reception was made using an indoor or outdoor antenna. *NCS and reporting stations can use the FORM 2 near the end of this document to provide the information above. NCS stations may wish to print this form for receiving the information.*

It is important that this information be sent by *ONLY ONE MEANS* to avoid duplication. If you are sending it on HF voice, do not send it redundantly on VHF/UHF. ATIS reception reports are **NOT** to be sent by NTS.

A list of the airports with ATIS/ASOS stations is here:  
[https://www.faa.gov/air\\_traffic/weather/asos?state=MA](https://www.faa.gov/air_traffic/weather/asos?state=MA)

Net controls should log this information from participants. It will be sent to Rob Macedo by email later for potential submission to some of our partners such as MARS.

**Note:** If you will be sending in an ATIS report by Winlink, please transcribe the information you hear on the ATIS station *in addition* to the signal reception report and include it in your Winlink message (see Winlink section). **Do NOT send the transcription if using voice to send your report as it would be too lengthy to send with the short timeframe of the exercise. Use only the signal reception report if reporting ATIS by voice.**



# NETS and mode of operations

## HF voice operation

An HF net will be started on 60m and 75m in MA. They will operate concurrently. Participants can send their primary voice activity involving ATIS radio stations if they wish. They can also send signal reports of other participating HF net stations for the record.

## 60m voice operations

HF 60m operation will be first attempted on Channel one 5330.5 kHz. *As we are a secondary user on 60m, any primary user (US Government stations) cannot have interference from a secondary user. Primary users will have priority access at all times.* If a primary user is operating on channel one, the net will fall back and be conducted on channel four: 5371.5 kHz.

## VHF/UHF voice operation

ARES groups are requested to set up voice nets as you normally do for exercises. These nets can be repeater, simplex or any combination of the two. Participants can send their primary voice activity involving ATIS radio stations if they wish. Any additional voice components for the exercise can be set by the local ARES/RACES group to fit their needs.

## 6m voice operations

There will be short 6-meter voice net beginning at 11:30am that will test the 6m repeater.

53.31-Mount Wachusett Repeater PL: 71.9 Hz

## HF and VHF/UHF Winlink operation

The ATIS primary operations activity can be sent by Winlink HF and VHF/UHF Winlink for this exercise and will involve the use of RMS Winlink sites. If you are sending by Winlink, please **transcribe** the information you hear on the ATIS station along with the signal reception report and include it in your Winlink message. Form 1 contains a summary of what the ATIS information means at the top and will give you a good summary of how it is used. You can copy the info you receive into the form in the DATA section and make sense of it by looking at the top reference info. The transcribed info and the signal report at the bottom can be copied into Winlink for sending. Send only the info. Do **NOT** attempt to **ATTACH** any Word or text document itself to your Winlink message. Only the text itself is needed. It can be cut and pasted into the Winlink message. The reports can be sent directly to the Eastern MA ARES SEC Rob Macedo KD1CY.

## Echolink/IRLP operation

Echolink will be operational for this exercise. It will be the \*NEW-ENG3\* Echolink conference node 9123/IRLP 9123. It will be monitored by several ARES leaders and will serve as an online component.

## NTS operation

In an effort to try to promote NTS using digital modes, NTS messages can be passed by the MA/RI Digital Net (MARIDN) using NBEMS. Participants will send an NTS message to the Eastern MA Section Manager Jon McCombie N1ILZ. The message will specify which activities you participated in the exercise such as the ATIS part, NTS part or both. It can also specify whether you used HF, VHF in your operation. N1ILZ will compile these messages and send them to the Eastern MA ARES SEC Rob Macedo KD1CY. An NTS voice option will also be available on 2m FM on the Boston 145.230 repeater.

## NTS operations on HF NBEMS

There will be an HF NTS NBEMS net available that will use digital modes to pass NTS messages. This net will be a special edition of the Massachusetts-Rhode Island-Digital Net (MARIDN). The net will operate on 3582.5 kHz and begin with the Thor 22 mode. More on this net and its normal operation can be found here on the Eastern MA ARRL website [MARIDN](#)

## **NTS VHF 2m operations**

NTS will also have a voice 2m net (EM2MTN) on the Boston 145.23- repeater. NTS Official Relay Stations are asked to checkin and send a Radiogram to Marcia KW1U with their capabilities during this exercise. A specific formatted message may also be read and sent. Other participants are welcome to join the net and try their hand and copying and sending as well.

## **Minute Man Repeater System operation**

The Minute Man Repeater system (MMRA) will be active during the exercise. Primary voice activity such as the ATIS radio information can be sent along with other messaging or participant info. There will also be a simplex component that will be conducted by net control with participants moving to a simplex frequency (see frequency list later in the document).

## **Metrics for participation**

All ARES groups participating in the exercise are encouraged to send a list of participants and activities by email after the exercise so a good overview of participants can be established. Send to your local ARES EC and/or DEC. If you are unaware of who your leader is, Visit the Eastern MA ARES website at <https://ema.arrl.org/ares/>

## **Exercise Frequency Usage**

**Two meter and 440 MHz local voice nets: - The following is a list of key frequencies with any additional frequencies at the discretion of local ARES Group**

147.000-Dartmouth Repeater (PL: 67.0 Hz)

147.180-Bridgewater Repeater (PL: 67.0 Hz)

146.895-Walpole Repeater (PL: 123.0 Hz)  
146.955-Westford Repeater (PL: 74.4 Hz)  
145.230-Boston Repeater (PL: 88.5 Hz)  
147.435-Western Middlesex ARES Simplex (PL: 110.9 Hz)  
146.580-Cape and Islands ARES **District wide Simplex (No PL)**  
446.675-Marlborough Repeater (PL: 88.5 Hz)

The MMRA Network will be utilized at the section level – a link to the repeaters linked up is listed at the end of the frequency usage document

146.550-MMRA **Simplex component**  
146.580-MMRA **Simplex component** *secondary*

Secondary Frequencies that will be monitored:

146.985-Blue Hill Science Center – Milton, MA (linked) (PL 88.5 Hz)  
449.125-Blue Hill Science Center – Milton MA (linked) (PL: 146.2 Hz)  
446.325-New England Sci-Tech - Natick, MA (PL: 146.2 Hz) \*\*\*

### **6 meter operations**

53.31-Mount Wachusett Repeater PL: 71.9 Hz

### **Winlink Express VHF (non-P2P): 145.090 FM frequencies –**

**Local VHF RMS Stations – Some stations may offer both Packet and VARA FM modes**

**AB1PH-10 connect direct or via digipeaters WA1PLE-2, W1STR-3 or BROCK  
W1SHS-10 connect direct or via digipeaters WA1PLE-2, W1STR-3 or BROCK  
KF1D-10 connect direct or via digipeaters WA1PLE-2, W1STR-3 or BROCK  
W1SGL-10 connect direct or via digipeaters WA1PLE-2, W1STR-3 or BROCK  
WZ0C-10 connect direct or via digipeater W1STR-3**

**Or other VHF RMS stations available from Winlink Express station lookup.**

**Also see [http://www.n1xtb.net/EMA\\_packet\\_map.html](http://www.n1xtb.net/EMA_packet_map.html) for locations of local RMS stations**

**Telnet may be used if available and necessary.**

### **HF Winlink stations (Non-P2P):**

**Local HF RMS stations - VARA HF Preferred mode**

**W1EO: 3937.900 KHz center, 3936.4 KHZ dial  
KF1D: 7101.3 KHz center, 7099.8 KHz dial  
W1EO: 7102.5 KHz center, 7101.0 KHz dial**

**Or other HF RMS stations available from Winlink Express station lookup.**

**Telnet may be used for training purposes if RF capability is not present.**

**Primary region wide 75m HF Operations: 3930 kHz LSB**

**Primary 60m HF voice operations: 5330.5 kHz (USB), fall back to 5371.5 kHz if needed. Note that newer HF radios that have 60m as a standard feature often have the frequencies displayed as channelized (center frequencies) whereas radios that have been modified for 60m operation often display the dial frequencies. Power limit is 100 watts ERP.**

Center	'Dial' Frequency (USB)	'Unofficial' Channel Designation
5332.0 kHz	5330.5 kHz	Channel 1
5348.0 kHz	5346.5 kHz	Channel 2
5358.5 kHz	5357.0 kHz	Channel 3
5373.0 kHz	5371.5 kHz	Channel 4
5405.0 kHz	5403.5 kHz	Channel 5

**Primary NTS HF NBEMS 75m (MARIDN) operations: 3582.5khz- start mode: Thor22 1500hz**

**HF Winlink stations: See online list on the [winlink.org](http://winlink.org) site**

**Echolink: \*NEW-ENG3\* node 9123/IRLP: 9123**

**Minute Man Repeater system (MMRA) linked repeaters VHF/UHF (see [MMRA.org](http://MMRA.org) for repeater list and look at the ARES configuration): [http://www.mmra.org/repeaters/repeater\\_index\\_by\\_linkstate.html](http://www.mmra.org/repeaters/repeater_index_by_linkstate.html)**

**\*\*\* If available**

## Group Operations

There will be several groups operating during this exercise. They may be RACES/ARES/Auxcomm or some combination thereof. Information regarding their operations can be added below if needed.

## Rhode Island Section Participation

Possible activities:

- Check into HF nets
- Possibly try to check into MA VHF activity, if possible
- Possibly conduct VHF net and send information to EMA nets or by digital

# Form 1

A typical ATIS report will be:

KBED A 2058Z 260@9G15 10 4000SC 44/414 3030

AAAA B CCCCC DDDDDDDD EE FFFFFFF GG/HHH JJJJ

A – Airport code

B – Sequence Letter, changed each time it is updated (A-Z, ATIS stations only)

C – Time of the report in UTC/Zulu time

D – Wind direction (magnetic) @ speed (speed in knots, with optional gust)

E – Visibility (Statute Miles)

F – Cloud level (feet) and coverage (Clear, few, scattered, broken, overcast)

G – Temperature in C

H – Dew point in C

J – Pressure in inHg (no decimal point)

DATA:

Airport code and/or Name:

Date and Sequence Letter:

Time:           Zulu

Wind Direction:       Speed:       knots

Visibility:           miles

Cloud Level:         feet

Coverage:

Temperature:        C

Dew Point:           C

Pressure:            inHg

Other conditions or runway status:

ATIS Signal Report: Same info as used in Form 2, but for Winlink Sending **ONLY**

ATIS Station 1:

ATIS Station 2:

ATIS Station 3:

# Form 2

Form 2 used to send and log ATIS radio station reports. **This will be used for voice reports only. This will not be used for digital sending of the transcribed information.**

Reporting station	Location	ATIS Station 1	ATIS Station 2	ATIS Station 3	Indoor/Out Ant used