# Eastern MA ARES Fall SET Mini-Exercise 2025 Scenario and Guidelines



# **Eastern MA ARES**

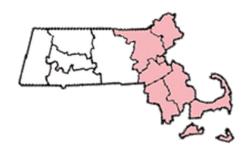
Section Mini-Exercise: "November Wind"

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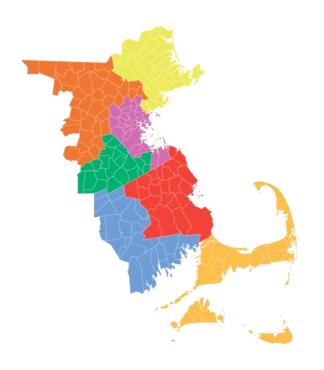
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# Eastern MA ARES Map



#### **Date and time of Exercise**

Saturday November 15th, 2025

Setup time: 8:30am

Start Time: 10:00am

End Time: Noon

Operational Duration: 2 hours

# **Purpose**

The Eastern MA Section Amateur Radio Emergency Service (ARES) will conduct a fall operations Mini-exercise to test its capability in establishing communications with stations within its section and outside it under simulated emergency conditions. The operational exercise called "November Wind" 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.

#### **Scenario**

As November began, the Atlantic Hurricane season was winding down slowly. Hurricane Nathan appeared to be the last of the season as it moved into Puerto Rico on November 8<sup>th</sup>. Nathan hit the island as a category one. It caused moderate damage before turning towards the NW on the 9<sup>th</sup>.

As Nathan began moving up the US east coast, it began to lose its tropical characteristics and took on the structure of a hybrid coastal storm that derives its energy from both warm water and the contrasts of air masses. As Post Tropical storm Nathan neared SE MA on November 11<sup>th</sup>, it had strength similar to a category one hurricane. The wind field was very large with a huge moisture package. Wind gusts over 85mph occurred over the Cape and Islands, as well as, the south coast and parts of Plymouth County. Wind gusts near 75mph affected much of the rest of eastern MA. Western MA had 60mph winds but also very heavy precipitation before the system pulled away. Heavy rain of 4-5" impacted much of MA causing flooding in several areas.

#### **Situation Report**

The situation in much of MA is significant, but not as catastrophic as it could have been with a summer hurricane landfall. The greatest damage occurred on the Cape/Islands, as well as, parts of Plymouth and Bristol counties. Although building damage was limited, many antennas were damage on important facilities. This has also happened in other others but with a bit lesser impacts.

The power situation is significant in eastern MA, especially over the extreme SE sections. Many shelters are open as a result of the colder weather combined with the outages. The eastern MA ARES has begun a 60m net and a 75m net for region wide coverage. Many EMA's in eastern MA have activated with the most in SE areas. Over the Cape, a couple of field sites have been set up in Dennis and Falmouth due primarily to antenna damage at important operating sites and EOC's. A mobile field unit may be deployed to help with gaps on the outer Cape. MEMA is active from Framingham and is working with local EMA's.

This is an unfortunate situation in parts of SE MA, but overall it could have been much worse.

Good Luck to responders!

#### ARES groups and simulated activities

This exercise guideline is deliberately generic in nature and is scaled back considerably compared to other similar exercises in eastern MA. ARES/RACES/AUXCOMM 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 many of the operations involved in this exercise will utilize home stations in many districts.

# **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 SKYWARN tactical damage report by VHF or HF voice
- Send a SKYWARN damage report by Winlink on VHF/UHF or HF using ICS-213 form
- Check in on the MMRA repeater network
- Check in and/or pass information the NEW-ENG3 9123 Echolink node
- Conduct an NTS NBEMS net on 40m sending NTS messages or damage report sent by ICS-213
- Conduct NTS voice messaging on 2 meter voice nets
- Conduct a 6 meter net on Mt. Wachusett repeater

Note that not all objectives will apply to every group.

# **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, 75/80m HF (40m alternate). On Winlink, any mode or usable band is permitted. If using NBEMS, 40m will be used with an 80m alternate.

#### **Setup and Timeline**

Setup time will be 830am. 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** NTS Health and Welfare messaging. The first will involve the sending of a SKYWARN damage report. This can be sent using Winlink or NBEMS and using the ICS-213 message form. This can also be sent by voice on VHF 2m or by the HF Nets. NTS health and welfare messages can be sent by the MARIDN NBEMS net on 40m (with an 80m fallback). There will also be 2 meter NTS operations on VHF. A 6 meter net will be conducted on the Mt. Wachusett repeater.

Participants may choose any or all activities they wish to attempt. You do not have to do all of the activities to be successful.

#### SKYWARN damage report

The reports should be sent to the Eastern MA ARES SEC/SKYWARN Coordinator Rob Macedo KD1CY. On Winlink, they will be addressed to **WX1BOX**. The report should include the time of the report, the source, the location and the details of the damage. The report should be as concise and brief as possible as this may be received on voice nets. Please send your report by only one method to avoid duplication.

If the reports are being sent on voice, they will be tactical in nature and read as plain text to the Net control stations (NCS). The NCS should log these reports. It is up to those NCS operators to determine how they will get the reports to SKYWARN Coordinator Rob Macedo KD1CY. This could be done by a bulk sending on Winlink to **WX1BOX** or by other means at their discretion.

### **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 SKYWARN tactical damage if they wish. If you have already sent included this information by Winlink, please do not send by voice in order to avoid duplication.

#### 75m Net operations

A 75m net will be established on 3930khz LSB (See frequency listings section). Note that 75m operations can be difficult during this time of the day in the current phase of the solar cycle. If 75m proves be unusable, the *Net Control Station (NCS) may move the net to 7243khz by his or her discretion*. If a participant does not hear any activity on 75m after a time, try the fall back frequency of 7243Khz.

#### 60m voice operations

HF 60m operation will be first attempted on Channel FIVE 5403.5 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 FIVE, 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 a SKYWARN tactical damage report if they wish. Any additional voice components for the exercise can be set by the local ARES/RACES group to fit their needs. NCS stations can determine how to pass any reports at their discretion.

#### 6m voice operations

There will be 6-meter voice operations beginning at: 1130am.

53.31-Mount Wachusett Repeater PL: 71.9 Hz

#### HF and VHF/UHF Winlink operation

The primary operations activity of sending the SKYWARN damage report can be sent by Winlink HF and VHF/UHF Winlink for this exercise and will involve the use of RMS Winlink sites. A list of currently operating HF winlink RMS stations with locations and modes can be found on the <a href="winlink.org">winlink.org</a> online site. The reports can be sent to <a href="winlink.org">WX1BOX</a>.

#### **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 Health and Welfare operation

In an effort to try to promote NTS using digital modes, NTS will stand up a health and welfare NTS operation using digital. Messages can be passed by the MA/RI Digital Net (MARIDN) using NBEMS on 40m. NTS will also continue to exercise its voice capabilities on VHF 2m voice.

#### **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 for **ONE HOUR (10am-11am).** The net will operate on 7042.5kHz (1500 Hz center) 40m and begin with the Thor 22 mode. If the 40m band is unusable, then the NCS may move the net to the fallback frequency of 3582.5khz in the 80m band. If participants detect no activity for 10 minutes they should assume that the NCS has moved the net to 80m. More on this net and its normal operation can be found here on the Eastern MA ARRL website MARIDN

NTS health and welfare message can be addressed to friends or others. Remember to include the drill wording to preclude and misunderstandings. The NTS **precedence** of the NTS message should be **TEST-WELFARE or TEST-W**.

#### **Eastern MA Section NTS digital Net**

**MARIDN (Mass - Rhode Island Digital Net)** 

Primary: 7042.5khz 40m USB THOR22 1500Hz center Secondary: 3582.5khz 80m USB THOR22 1500Hz center

Please note that the NCS station for the MARIDN net can also accept a SKYWARN damage report using the ICS-213 form in NBEMS. This offers another way to send this report and adds to the flexibility of the digital net.

#### Eastern MA Section NTS voice nets on 2m

#### NTS operations on 2 meter voice

An NTS net will be established on the 145.230 (PL 88.5) Boston repeater for the passing of any NTS Health and Welfare traffic. The operation will pass the same kind of messages as on the NBEMS operation as described above. We encourage stations within range of the repeater to compose traffic and pass it on this net. For those stations who cannot reach the Boston repeater, the tactical net on the Waltham repeater will also take and NTS traffic in addition to tactical messages.

# Tactical net on 2 meter voice Waltham (also accepting NTS messaging)

There will be a tactical net on the Waltham repeater 146.640 (PL 136.5). This net will take tactical messages and will also serve to take any additional NTS traffic from stations that cannot access the Boston 2m NTS net.

#### 2 meter voice net on Westford repeater

There will be a 2 meter voice net at 1130am on the Westford repeater 146.955 (PL 74.4) (See repeater and frequency section)

# Minute Man Repeater System operation

The Minute Man Repeater system (MMRA) will be active during the exercise and will be linked up in the same configuration as the monthly ARES Net. See the following link: <a href="https://mmra.org/repeaters/repeater linking.html">https://mmra.org/repeaters/repeater linking.html</a> (Click the ARES box to see the repeaters and other systems linked).

### **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) - local net than linked into the MMRA Section Net via IRLP

147.180-Bridgewater Repeater (PL: 67.0 Hz) -Will be linked into the MMRA Section Net via IRLP

146.895-Walpole Repeater (PL: 123.0 Hz)

146.955-Westford Repeater (PL: 74.4 Hz) (net at 1130 AM) Echolink Node: 380799 Allstar node: 29769

147.435-Western Middlesex ARES Simplex (PL: 110.9 Hz)

146.580-Cape Cod ARES Simplex (No PL) (1030 AM Start time)

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 in the MMRA Repeater section above.

#### Additional 2 meter Nets

146.640-Waltham repeater tactical net (PL 136.5) also accepts NTS messages

#### 6 meter net

53.31-Mt Wachusett (PL 71.9 Hz)

#### Cape Cod and Islands 2m simplex net (1030am)

146.580 FM simplex (alternate if needed).

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

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

N1XTB-10 connect direct or via digipeaters WA1PLE-2, W1STR-3 or BROCK 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 Note: W1SGL-10 has been moved from Barnstable to Falmouth. A New Digi (N1YHS-7) has been placed at the old Barnstable location and can be used to get to W1SGL-10 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 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.

NOTE: Some HF Winlink stations may be unavailable or have changed.

Primary region wide 75m HF Operations: 3930 kHz LSB

75m net will move to 7243khz LSB 40m if 75m is deemed unusable by the NCS.

Primary 60m HF voice operations: 5403.5 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 MARIDN HF NBEMS 40m operations: 7042.5khz- USB, start mode: Thor22 1500hz, Secondary frequency: 80m 3582.5 KHz USB, start mode: Thor22 1500hz

HF Winlink stations: See online list on the <u>winlink.org</u> site. You can also check your path to other Winlink stations from within the program (if you are online)

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

Minute Man Repeater system (MMRA) linked repeaters VHF/UHF (see MMRA.org for repeater list and look at the ARES configuration): <a href="http://www.mmra.org/repeaters/repeater\_index\_by\_linkstate.html">http://www.mmra.org/repeaters/repeater\_index\_by\_linkstate.html</a> \*\*\* 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.

# Appendix 1: Cape Cod and Islands ARES Operation

#### Overview

The Cape Cod and Islands ARES will follow the section exercise and its objectives. It will *NOT* have a separate document as it normally does as this is a section exercise. It will however, have a field team that will deploy to Dennis as our Net Control station. The station will conduct an FM simplex Tactical Net on **146.580**. Most stations in this exercise will utilize their home stations as we do need to verify their operations from time to time. We will have at least on fixed field site and possibly two. There will be a mobile field site as well. The main NCS field site will be in Dennis. The Upper Cape field site may be in Falmouth (To be announced). The mobile field site will be in Chatham. Exercise participants are allowed to try mobile operation if they wish to do so from an area. Be sure to notify NCS if you are doing this during the net check-in process.

#### **Tactical Net Operation**

The Cape and Islands ARES 2M simplex tactical net will begin at 1030am to allow participants time to get on HF first for the sections nets. The operating procedure for this exercise will consist of a roll call format. The NCS station will do a staggered priority and geographical call up. 1st call will be for any EOC stations in our district (including the Islands) and for any mobile stations. The second call up will be for home stations by order of zones in sequence (Outer Cape, Lower Cape, Mid Cape, Upper Cape, Nantucket, and Martha's Vineyard). Last call up will be for stations outside the Cape/Islands district. After the initial call up, NCS will designate one station in each zone (if available) that will call out for any stations that the NCS could not hear. NCS will then poll all individual check in stations which will read aloud those stations they could hear on the net. We will evaluate successful communications paths based on that data. All

stations will keep a log of whom they can hear and send it to the ARES DEC by email after the exercise. Mobile units (if any) may call NCS outside of the roll call when any mobile operators feel the necessity of doing so. In a change from previous exercises, we will not be asking each station to call out and attempt contact with all the stations on their list. This change is in order to leave more time for other operations.

When participants are recording/reporting the received signals of incoming stations, we will use terminology similar to that used in the Upper Cape Falmouth ARES simplex net.

Signals will be reported by:

- 1. No signal
- 2. Weak readable
- 3. Good readable
- 4. Strong readable (if signal is exceptionally strong)

#### NTS formal message to be sent into the NTS system

The field sites will send an NTS formatted message to the NCS station indicating how many participated in the exercise and what form of emergency power was utilized. The Dennis NCS field site will then compose an NTS message that will be sent to the Eastern MA ARES SEC regarding the number of participants in the exercise and the field site information.

# **Appendix 2: Other Group activity** *TBA*