Eastern MA ARES
Summer SET Exercise 2025
Scenario and Guidelines

Eastern MA ARES

Section Exercise: "Summer Strike"

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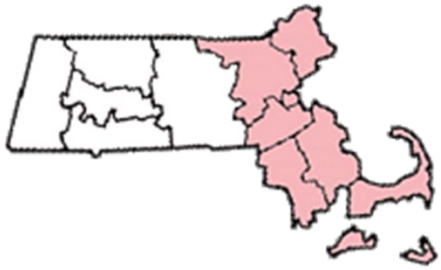
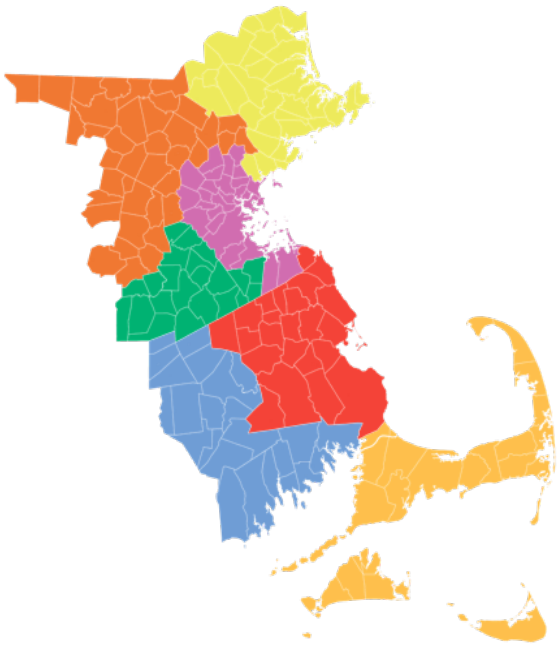


Eastern MA ARES Map



Date and time of Exercise

Saturday August 2nd, 2025
Setup time: 8:30am
Start Time: 10:00am
End Time: 12:30pm
Operational Duration: 2.5 hours

Purpose

The Eastern MA Section Amateur Radio Emergency Service (ARES) will conduct a summer 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 **"Summer Strike"** 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

The summer of 2025 was a typical season of warm days and nights without unusual precipitation until the mid part of July. An increasing number of stationary fronts and waves of low pressure, increased flood events throughout southern New England as the later part of July unfolded. Several significant flooding and flash flooding events occurred by July 22nd. The ground became saturated in much of the region except for the Cape and Islands.

The tropical season in 2025 during July was a bit on the slow side but that all changed as the final week of the month came into view. Tropical Storm Fredricka formed over the Bahamas and rapidly intensified to a minimal hurricane on July 23rd. As Fredricka began to turn up the coast on the 24th, it continued to deepen rapidly and topped out as a category four hurricane at 150 mph just SSE of the outer Bank of NC. Fredricka approached the southern New England coast on July 26th as a category three hurricane at 115mph. The hurricane made landfall just west of Narragansett Bay with winds of 115mph. A storm surge of 15-17ft occurred along the south coast of RI and MA including the Cape Cod area.

As Fredricka crossed the coast it began to slow its forward speed in a highly unusual situation where high pressure to the north and east of New England was preventing her rapid escape from the region. At this point, a nightmare scenario began to unfold as Fredricka slowed to a crawl and began transitioning to a more conventional low pressure system. Despite weakening to a strong tropical storm with winds of 70 mph, the system crawled through eastern MA while battering the coast for two tides cycles. The central and western part of the state were deluged with rainfall over 26". As a weakened Fredricka finally pulled away from MA on the 28th, it left a battered Bay State that was wind blown in the east and partially underwater to the west.

Situation Report

The situation in much of MA is quite grave. The south coast of MA/RI suffered the greatest wind damage and surge values. The fact that the initial hit was extended time wise in both wind and surge for more than a single tide cycle has made the situation so much worse. Even after the category three winds moved in, winds over 85mph still raked the area for almost 20 hours. Many structures on the south coast have been destroyed by surge with many structures severely damaged by wind from roof/curtain wall failure.

In the rest of eastern MA, the coast has also been battered from tide cycles. Winds also have caused heavy damage as much of the area has seen winds over 80 miles per hour for an extended period of time.

In western MA, catastrophic flooding is the issue. Over 26" of rain have put many areas underwater. Roadway access in western and central sections of MA is extremely limited at best.

MA and RI have ongoing declarations of disaster. The flow of aid has been slow from Washington and the states have had to rely on much of their own resources which have become highly problematical. Shelters are open in many communities throughout the region. The power grid is eastern sections has suffered very heavy damage especially

along the south coast and Cape where an estimated restoration time is not even yet possible.

The state of telecommunications is highly variable. The greatest damage has been along the south coast including the Cape and Islands. A good percentage of the public safety repeaters are down in these areas including 800mhz and many commercial broadcast stations. Almost all of the amateur radio repeaters are down in this area as well. Many buildings being used on Cape Cod have suffered air conditioning damage and the incident management team is trying to keep people rotating in and out to minimize heat buildup along with rehab vehicles. The ARES teams have begun setting up outdoor field sites to help reduce the internal occupancy. Many buildings have also lost antennas or have suffered structural damage necessitating the move. Most units are using VHF simplex for local operations.

In other parts of eastern MA, there has been considerable damage to communications infrastructure, but not nearly as severe as south coastal sections. Many public safety and amateur repeaters are still operational as we get further north towards the south shore and metro-west. Most ARES/RACES/AUXCOM volunteers are using their repeaters with simplex as a backup for localized use.

In central and western MA, most of the commercial and amateur repeaters remain operational. The biggest issues are roadway accessibility due to the severe flooding. Most EMCOMM volunteers are using VHF repeaters along with HF to bridge longer distances.

HF voice nets have been established on 60 meters and 75 meters with 60 meters being the main workhorse due to its proven track record. HF and VHF Winlink are in operation along with an HF NBEMS Net for NTS and other messaging. NTS voice nets are active on VHF repeaters in areas away from the SE coastal zones. This will be a long and difficult few weeks for all of us. It is important that we all observe safety precautions and make sure we get rest when possible.

Good Luck to us all!

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 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 Field Situation Report form (FSR) by Winlink VHF or HF RMS station
- Include your SKYWARN damage report in the comments section of the FSR (if using Winlink).
- Report the NOAA Weather radio stations you can hear
- Report the signal strength of the NOAA weather radio station and some data from the broadcast
- 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 or 80m and pass traffic
- Conduct an NTS voice net on 2m VHF FM
- Attempt operations with the RI section on VHF and/or HF
- Conduct 6m operations on the Mt. Wachusetts 6m 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, 40m, 60m, 75/80m HF.

Setup and Timeline

Setup time will be 830am. The exercise will begin promptly at 10am. It will last approximately 2.5 hours and will end at 1230pm. 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 three primary operational activities **in addition to** NTS Health and Welfare messaging. The first will involve the sending of a Field Situation Report (FSR) by Winlink. The second will be the sending of a tactical SKYWARN damage report by voice on VHF 2m or by the HF Nets. The third activity will be to log which NOAA Weather radio stations you can hear at your location. You will note the call sign, frequency and location of the NOAA Weather radio station. If you wish to provide a signal report, you may do so by indicating (Good readable or Weak readable). We are also asking participants to monitor the NOAA weather broadcast briefly. You will wait for the hourly roundup of reporting locations. Then you will note the temperature of the closest location listed in the roundup. List this with the other NOAA weather report information. The NOAA Weather radio report can be passed on the HF voice nets, the 2m voice nets, or in the comments section under Box 11a of the "Field Situation Report Form", if you have Winlink. For those that do not have Winlink, the voice tactical SKYWARN damage report and the NOAA Weather Radio station report by voice will be your main activities. NTS health and welfare messages can be sent on voice 2M or by the MARIDN NBEMS net on 40m (with an 80m fallback).
Participants may choose any or all activities they wish to attempt. ***You do not have to do all of the activities to be successful.***

Field Situation Report form (FSR)

The primary ***digital*** **messaging activity** for this exercise will be the sending of a Field Situation Report form by **Winlink**. If you are unfamiliar with this form, there are various forums and YouTube presentations available to help you.

There is one important thing about this form. ***BOX #1 must be checked NO. If it is checked yes, the Winlink system or others could treat it as an actual emergency. Keep this in mind.***

Latitude and Longitude should be entered in decimal degree format. Do not forget the minus sign in front of the longitude value. If you have a GPS dongle set up, the coordinates will be filled in for you after setting it up.
Most of the form is relatively easy to figure out. If you wish to add comments or a damage report, it can be entered on Box 12. If you are entering a damage report in box 12, be sure to indicate the time of the report, the location, the source, and the damage details.

The FSR form should be addressed to: **KD1CY** using Winlink.

See the sample form on the next page.

FIELD SITUATION REPORT

Cape and Islands ARES

Setup Click to add an agency or group name Load Field Situation data Form info

For Non-Express recipients, this form is sent as plain text in the message body.
Once this page is submittefd No changes or editing of this message are allowed

PRECEDENCE: R/ Routine DATE/TIME: 2024-07-07 18:11:22Z TASK #

FROM: Frank OLaughlin

TO: KD1CY

INFO (CC):

*Call signs or E-mails entered into the **TO** or **INFO** fields above, can be multiples separated by a semicolon ;*

1. Is there an EMERGENT/LIFE SAFETY Need ○ **YES** ◉ **NO**

2. City Marstons Mills County: Barnstable State: MA Territory:

3. Latitude and longitude: LAT 41.669333 LON -70.448167 *MGRS* 19TCG7944514076 *Grid* FN41sq

If your local situation is LIFE CRITICAL, report via 911. If 911 services are not available, a reporter may use this form and mark the block for LIFE CRITICAL; the reporter should describe the situation and provide the residential address.

LAT and LON are required to map this SpotRep. If entering manually use Decimal Degree format or from an attached GPS device.
By default LAT, LON and MGRS to the center of the grid square listed in Express Settings

4a. POTS landlines functioning? ○ YES ◉ NO ○ Unknown - N/A

Verizon

4b. VOIP landlines functioning? ○ YES ◉ NO ○ Unknown - N/A

Verizon

5a. Cell phone voice calls functioning? ○ YES ◉ NO ○ Unknown - N/A

ATT

5b. Cell phone texts functioning? ○ YES ◉ NO ○ Unknown - N/A

ATT

6. AM/FM Broadcast Stations functioning? ◉ YES ○ NO ○ Unknown - N/A

WXTK 95.1

7a. OTA TV functioning? ◉ YES ○ NO ○ Unknown - N/A

If no, identify TV station.

7b. Satellite TV functioning? ○ YES ◉ NO ○ Unknown - N/A

Dish Network

7c. Cable TV functioning? ○ YES ◉ NO ○ Unknown - N/A

Xfinity

8. Public Water Works functioning? ◉ YES ○ NO ○ Unknown - N/A

Comments

9a . Commercial Power functioning? ○ YES ◉ NO ○ Unknown - N/A

Eversource

9b . Commercial Power Stable? ○ YES ○ NO- Brown outs/blinking lights ◉ Unknown - N/A

If no, state provider.

9c. Natural Gas Supply functioning? ◉ YES ○ NO ○ Unknown - N/A

National Grid

10. Internet functioning? ○ YES ◉ NO ○ Unknown - N/A

Cable Xfinity

11a. NOAA weather radio functioning? ◉ YES ○ NO ○ Unknown - N/A

KEC73 162.550 Cape Cod Good readable Hyannis temperature 76F at 10am

11b. NOAA weather radio audio degraded? ○ YES ◉ NO ○ Unknown - N/A

Identify NOAA Weather Radio Transmitter by frequency, call sign or location.

12. Additional Comments *Brief summary of current situation - expected outage times, major observations, etc.*

You may add any damage reports here or additional comments. Any damage reports should include the time of the report, the source (yourself or from another), the location and the details of the damage.

13. POC Frank OLaughlin

Submit Save Field Situation data Reset Form Ver 0.2.10

SKYWARN Tactical damage report

The second primary activity is the sending of a tactical SKWARN damage report. This report will be sent by voice on either HF, 2M or in the Box 12 comments section of the FSR form by Winlink as previously mentioned. 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.

NOAA Weather Radio Report

The NOAA Weather Radio Report can also be sent by voice HF or VHF net. It will contain the call sign, frequency and location of the station. If you wish to provide a signal report, you may state that the station was (Good readable) or (Weak readable). Your temperature report from the nearest location in the NOAA hourly roundup in the broadcast can also be included. Please send your report by only one method to avoid duplication.

Net control stations (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.

NOAA Weather Radio report on the (FSR) form

If you wish to submit your NOAA Weather Radio Station report by digital, you can put it in BOX 11a on the “Field Situation Report Form” (FSR) as mentioned earlier.

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 reports and NOAA Weather radio reports 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 or the NOAA weather radio report if they wish. Any additional voice components for the exercise can be set by the local ARES/RACES group to fit their needs.

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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 the Field Situation Report Form 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 winlink.org online site.
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 Health and Welfare operation

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

EM2MTN (Eastern Mass 2 Meter Traffic Net) Voice FM
145.23- PL88.5 Boston

MARIDN (Mass - Rhode Island Digital Net)
Primary: 7042.5khz 40m USB THOR22 1500Hz center
Secondary: 3582.5khz 80m USB THOR22 1500Hz center

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: https://mmra.org/repeaters/repeater_linking.html (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) (Call-Ups at 1000 AM, 1030 AM, 1100 AM, and 1130 AM)
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.

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

146.580 FM simplex
147.420 FM simplex (alternate if needed).

Eastern MA NTS 2m Net

145.230-Boston Repeater (PL: 88.5 Hz)

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

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 winlink.org site and 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): 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.

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 full 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 two field sites for this exercise and a mobile field site**. The main NCS field site will be in Dennis. The Upper Cape field site will be in Falmouth. 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*

Rhode Island Section Participation

(RI ARES Section Exercise with RI EMA at Newport Jazz Festival ongoing in parallel with the Eastern Mass ARES Exercise)

Likely activities:

- Check into HF nets
- Check into MA VHF activity, if possible
- Send information to EMA nets or by digital – RI VHF Nets will be active for their exercise