The Massachusetts
Department of Public Health
'Helping People Lead Healthy Lives In Healthy Communities'

The Massachusetts Emergency Medical Services Communications Plan

Contact for Questions

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Acknowledgements

Emergency Medical Advisory Board (EMCAB) Communications subcommittee and its many contributors

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2 Executive Summary

In accordance with M.G.L. c. 111C, §3(b)(23), the Department of Public Health has the authority to "develop and implement a comprehensive statewide EMS communications plan and system, coordinating regional EMS councils, regional plans and systems, in cooperation with other agencies having concurrent jurisdiction."

The Plan describes the following:

1. **Participants** – the roles and responsibilities of the people and organizations involved with communications increases its effectiveness and efficiency. This section describes the positions and organizations which support, either directly or indirectly, the EMS community.
2. **Infrastructure** – an understanding of the communication infrastructure available and minimum standards for equipment enables effective communication. This section describes and, as appropriate, sets the minimum requirements for communications and information sharing infrastructure available to the EMS community.
3. **Protocols and Regulations** – the proper use of communication infrastructure is an important component to service delivery. This section describes key EMS related response protocols that utilize communication infrastructure.

The Office of Emergency Medical Services, Department of Public Health Emergency Preparedness Bureau developed the Massachusetts Emergency Medical Services Communications Plan based on recommendations of the Communications subcommittee of the Emergency Medical Care Advisory Board (EMCAB).

3 Purpose

The Massachusetts EMS Communications Plan provides a framework which describes emergency medical services organizations and their systems so that they may be comprehensively integrated to facilitate quality emergency medical care throughout the Commonwealth for its residents and visitors.

The purposes of the EMS Radio Communications Plan are:

1. Clarify the role of state, regional, and local agencies in planning, implementing, and operating EMS communications systems.
2. Establish minimum standards with which all ambulance services' communications and communications equipment must comply, pursuant to 105 CMR 170.380(D) of the EMS System regulations.
3. Identify shared technological features of existing radio communications systems assuring compatibility of users on an intra-state basis and, as far as possible, an inter-state basis
4. Assign unique technical specifications of equipment and systems to minimize sources of interference.
5. Provide a reference for agencies and manufacturers who require information concerning EMS radio communications in the Commonwealth.

6. Fulfill the Federal Communications Commission requirement established in 90.20 is the appropriate section of Title 47 C.F.R. Chapter 1. These are the rules & regulations for the *Public Safety Pool*.
7. Except where noted, this is a statewide plan. There shall be MDPH-approved regional communications plans, which are compliant with the state plan, but provide greater specificity than the statewide EMS Communications Plan.

4 Legal Status of Plan

Under the state's EMS System regulations, all ambulance services' communications and communications equipment must comply with the standards and requirements in the EMS Communications Plan. 105 CMR 170.380(D). Therefore, the EMS Communications Plan has the force of regulation. Furthermore, all EMS Services must follow the State and MDPH- Approved Regional EMS Communications Plans.

Compliance problems shall be addressed by MDPH/OEMS in accordance with its procedures for investigation and enforcement of all allegations of regulatory violations. See 105 CMR 170.705 through 170.795.

5 Participants

This section describes some of the key participants in the EMS community for communications.

5.1 Massachusetts Department of Public Health (MDPH) and its Programs, Emergency Preparedness Bureau (EPB), and Office of Emergency Medical Services (OEMS)

The Massachusetts Department of Public Health (MDPH) is the lead agency statewide for emergency medical services in the Commonwealth. M.G.L. c. 111C, §3. The Department as a whole operates many programs serving the people of the Commonwealth to enhance medical care and overall health. MDPH achieves this mission through investments in infrastructure and programs to prevent and treat illness and medical related hardship.

The Office of Emergency Medical Services (OEMS) is the program within the MDPH that is charged with carrying out the mission of M.G.L. c. 111C, which is to promote a statewide community-based emergency medical services (EMS) system that reduces premature death and disability from acute illness and injury through the coordination of local and regional EMS resources.

Among its many functions, OEMS licenses ambulance services, certifies EMTs and ambulance vehicles, defines the minimum standards for EMT training and accredits EMS training institutions within the Commonwealth. OEMS also develops, implements and enforces regulations, administrative requirements and other policies for EMS in the Commonwealth; develops and updates the Statewide Treatment Protocols governing scope of practice and clinical care of EMTs in Massachusetts, and reviews and approves local service zone plans for EMS delivery in the Commonwealth. OEMS also coordinates and plans EMS communications, MCI (often in conjunction with MEMA, below), organization and response activities.
MDPH also licenses hospitals for the service of providing medical control to ambulance services, designates trauma centers and primary stroke service hospitals, and administers numerous federal grants that contribute to the EMS community.

The Office of Preparedness and Emergency Management (OPEM) within MDPH provides guidance and technical assistance about emergency preparedness and emergency management activities. This includes the provision of trainings, drills and exercises for the health and medical community throughout the Commonwealth, the development comprehensive statewide plans to address medical surge and pandemic influenza, the enhancement of coordination between all DPH emergency preparedness programs and the development of additional linkages with programs and activities funded through the Department of Homeland Security (DHS) and the state's Executive Office of Public Safety and Security (EOPSS).

The OEMS website can be found at: http://mass.gov/dph/oems, the MDPH websites can be found at: http://mass.gov/dph and the EPB website can be found at: https://www.mass.gov/orgs/office-of-preparedness-and-emergency-management#:~:text=Office%20of%20Preparedness%20and%20Emergency%20Management%20(OPEM)&text=OPEM%20provides%20planning%20and%20preparedness,as%20well%20as%20volunteer%20opportunities.

5.2 Massachusetts Emergency Management Agency

The Massachusetts Emergency Management Agency (MEMA) is the state agency responsible for coordinating federal, state, local, voluntary and private resources during emergencies and disasters in the Commonwealth. MEMA provides leadership to develop plans for effective response to all hazards, disasters or threats; train emergency personnel to protect the public; provide information to the citizenry; and assist individuals, families, businesses and communities to mitigate against, prepare for, and respond to and recover from emergencies, both natural and man-made. MEMA is actively involved in the coordination of Ambulance Task Forces during their mobilization.

The MEMA website can be found at:
http://www.mass.gov/mema

5.3 Regional EMS Councils

The Regional EMS Councils are charged with assisting and supporting MDPH and OEMS in accordance with duties assigned them pursuant to MGL c. 111C §4; the EMS System regulations, at 105 CMR 170.104, and in their contracts with MDPH. EMS Regional Directors are staff appointed by Regional EMS Councils to carry out the duties and functions of the Regional EMS Councils.

Appendix K contains contact information for each Regional EMS Council's offices.

5.4 Central Medical Emergency Direction (CMED) Center

The Federal Emergency Medical Services System Act of 1973 established the concept of a Central Medical Emergency Direction (CMED) Center. A CMED Center is an organization that provides specialized communications functions to connect, at a minimum, hospitals and medical first responders. CMED Centers play a role in coordinating EMS communications by:

- assisting EMS field personnel with communication during emergencies
- managing Medical radio channel usage
- maintain a clear procedure for EMS communications within a region
- connecting EMS field personnel to local Emergency Departments and Medical direction
- providing interoperability with other public safety agencies

For the purpose of this document, a CMED Center will have a jurisdiction and a coverage area. A jurisdiction is the geographic area for which the CMED must provide support, while the coverage area is the footprint of radio coverage provided by the CMED infrastructure.

5.5 Ambulance Services

Ambulance Services are entities licensed by MDPH to provide, as a business or regular activity, whether for profit or not, emergency medical services, emergency response, primary ambulance response, pre-hospital medical care, with or without transportation, of sick and injured

individuals, by ambulance. They are both public and privately owned and are subject to complying with applicable Federal and State laws, regulations, administrative requirements, advisories and MDPH-approved service zone plans.

Required Duties

1. **Dispatch Communication Capability**
   Each ambulance service is responsible for maintaining proper communication capabilities to enable dispatch capability in order to respond to emergency medical events.
2. **Laws and Regulations.** Ambulance services must comply with the following statutes and regulations, as well as with all administrative requirements, advisories, guidelines, etc. This is not a complete list[1]:
   - M.G.L. c. 111C
   - 105 CMR 170.000: Emergency Medical Services System
   - 105 CMR 171.000: First Responder Training
   - 105 CMR 172.000: Implementation of M.G.L. c. 111, section 111C, Regulating the Reporting of Infectious Diseases Dangerous to the Public Health
   - Government Services Administration Ambulance Specification
   - Statewide EMS Communications Plan
   - Department-approved Regional EMS Communication Plan(s)

[1] Please see Appendix for link.

5.6 Ambulance Dispatch Center

Ambulance dispatch centers provide specialized communications functions to support ambulance services. The primary purpose of ambulance service communication is to coordinate a request for EMS, in accordance with the local service zone plan.

The composition and structure of Ambulance Dispatch Centers varies across the Commonwealth. Some are housed within hospitals and support a single ambulance service, while others are a more centralized resource.

Required Duties

1. **Recording Communications.** If the service is operating as a PSAP, then it must comply with the State 9-1-1 Department regulations.
2. **Dispatch Ambulances.** Provide dispatch communication for ambulance response requested through the 9-1-1 system. If service is operating as a PSAP, they must follow State 9-1-1 Department regulations, at https://www.mass.gov/orgs/state-911-department**.**
3. **Communications Coordination.** Comply with the published statewide EMS radio channel plan and its restrictions. Use local channels for radio communications.

5.7 Fire District Control Center

The Commonwealth has 15 Fire Districts designated for mutual aid assignment. The following information regarding the Fire District Control Centers is contained within other sections of this document:

- Role within Ambulance Task Force activation (see protocol)
- Radio frequencies utilization (please see Appendix C)

Listing of contact information and membership within Fire Districts, EMS Regions and Homeland Security Regions (please see Appendix H)

5.8 EMS Communications Operator (EMCO)

EMS Communications operators coordinate communications at the CMED and receive all requests for hospital/casualty management from EMS field units.

5.9 Emergency Medical Technicians

EMTs in Massachusetts are certified by MDPH's OEMS and required to carry out their duties to respond, assess, treat and transport patients in accordance with the state's EMS System regulations, and the Statewide Treatment Protocols. See 105 CMR 170.800.

5.10 Hospitals and Medical Directors

Hospitals must be licensed by MDPH's Division of Health Care Facility Licensure and Certification to provide Medical Control service to EMS services, pursuant to the Hospital Licensure regulations, 105 CMR 130.1501 to 1504, and affiliation agreements with ambulance services. Medical control physicians include affiliate hospital medical directors and physicians who provide on-line medical direction, all of whom work at hospitals licensed by MDPH to provide medical control and must meet Hospital Licensure regulatory qualifications. While in transport, EMS field personnel often request clinical assistance from Medical Control physicians.

Required Duties

Under the state's Hospital Licensure regulations, each hospital that provides medical control to an EMS service must ensure that its physicians who provide on-line medical direction have, among other qualifications, proficiency in the clinical application of the current Statewide Treatment Protocols, and proficiency in EMS radio communications. See 105 CMR 130.1504.

5.11 Ambulance Task Forces (ATFs)

The objective of the Ambulance Task Force (ATF) system is to enable the movement of large numbers of ambulances in an organized manner in support of mass casualty incidents or other major emergency situations, while ensuring that local emergency ambulance service remains fully available. There are fifty-eight (58) ATFs throughout the Commonwealth, providing statewide coverage. Each Ambulance Task Force consists of a Leader, an Alternate Leader, five (5) member ambulances, and an alternate member ambulance.

ATF member ambulances come from both public and private services. There are documents detailing ATF protocols for activation, communication, and roster maintenance.

- Protocols for ATF mobilization are found in the protocol section
- Information about ATF communications infrastructure is found in the infrastructure section

Required Duties

Each Task Force member has agreed to the terms described in an MOU which has been distributed and signed by an ambulance service representative.

5.12 Health and Medical Coordinating Coalition (HMCC)

HMCC

Regional Health and Medical Coordinating Coalitions, where available, provide coordination during emergency situations which cause patient surge. The primary goal of the creation of this entity and associated processes and plans is to provide coordination for and movement of patients when it appears the needs exceed the present available resources.

The HMCC is a multi-discipline organization that will meet in emergency situations to:

- Coordinate patient movement throughout disaster area and neighboring regions
- Be the linkage from region to MDPH and MEMA

Participants on the HMCC should include representatives from at least EMS, Hospitals and (if available) MDPH's OPEM.

6 Infrastructure

This section describes the infrastructure and equipment available for use in the Emergency Medical Services arena.

6.1 UHF Ambulance Radios

In order to ensure radio equipment functionality, MDPH has established minimum requirements for new radio purchases. These minimum requirements ensure that the equipment used by ambulance services will have the ability to utilize the current and future EMS radio infrastructure. Furthermore, adherence to these radio equipment requirements is critical for the continuation of high quality emergency medical service delivery within the Commonwealth.

This section defines standards established by MDPH for minimum equipment capabilities of U.H.F. two-way radios being purchased for use in ambulances licensed by the Commonwealth. The purpose of this standard is to ensure that all equipment being purchased for use in ambulances have the necessary capabilities to operate on existing and planned ambulance-to-hospital radio channels within the Commonwealth. Additionally the equipment being purchased shall be capable of utilizing public safety interoperability channels when required to do so. These standards define the baseline necessary to maximize the value and impact of funds expended for equipment purchases. All equipment purchased through Federal/State funding shall meet these standards, and it is expected that any equipment purchased by individual providers using other funds shall also meet these standards. This is to ensure reliable ambulance-to-hospital communications throughout the Commonwealth and interoperability with other public safety agencies both within the Commonwealth and nationally. No terminology within this document is to be interpreted to prefer or refer to vendor specific equipment.

Minimum Requirements

Ambulances services will be responsible to equip the appropriate vehicles with mobile radios. These radios can be used to dispatch the ambulance to the scene of a medical request and must enable communication with all CMED Centers within the Commonwealth of Massachusetts.

Required Minimum Equipment Capabilities

The following minimum capabilities are necessary features required to effectively implement reliable ambulance-to-hospital communications, as well as achievement of communications interoperability amongst various public safety agencies.

- Subscriber equipment shall be capable of operation from 450 MHz thru 470 MHz without performance degradation.
- Subscriber radio equipment shall have a channel capacity of 160, or greater.
- Subscriber radio equipment shall have the ability to have its channels programmed into a minimum of 10 zones, each containing a minimum of 16 channels.
- Subscriber radio equipment shall have an alphanumeric display capable of displaying a minimum of 8 characters, used for channel/zone naming.
- Subscriber radio equipment shall be capable of operating on any of the 38 E.I.A. standard C.T.C.S.S. or 83 D.C.S. codes; programmable on a channel-by-channel basis and including the ability to utilize different codes for transmit and receive or the ability for a

channel to receive in the carrier squelch mode while transmitting a C.T.C.S.S. or D.C.S. code.
- Subscriber radio equipment shall have, as it maximum transmitter output, a power of between 25 watts and 50 watts. Reduced transmit power levels that are programmable on a channel-by-channel basis are desirable but not required.
- Subscriber radio equipment shall conform to Mil Specifications 810 C, D, E and F.
- Subscriber radio equipment shall be equipped with an automatic time-out-timer that will turn off the transmitter, and audibly alert the user, once a predetermined period of continuous transmission has expired; desirable to have timed period programmable on a channel-by-channel basis, but in no event any longer than 90 seconds, it is preferred that it be 60 seconds.
- Subscriber radio equipment shall be capable of supporting conventional analog operation.
- Subscriber radio equipment shall have a minimum receive audio output of 10 watts.

Minimum Technical Performance Specifications
The following technical specifications for subscriber radio equipment have been developed to ensure that the two-way radios being purchased will be state-of-the-art and deliver a reliable service life, for years to come, while being operated throughout the Commonwealth.

Receiver
- 20 dB Quieting Sensitivity 0.5 µV
- 12 dB SINAD Sensitivity 0.35 µV
- Intermodulation Rejection 75 dB
- Spurious Rejection 80 dB
- Selectivity 65 dB
- Distortion at Rated Audio Output <5%

Transmitter
- R.F. Power Output (maximum) 25-50 watts
- Frequency Stability 2.5 ppm
- Emission (Conducted & Radiated) -70 dBc
- Deviation Limiting +/- 2.5 KHz

General
- Operating Temperature Range -20° F to +135° F
- Power Supply (nominal) 12 Vdc Negative Ground
- Maximum Current Draw 13 Amperes

Definitions and Background
This section is provided in support of the minimum equipment capabilities outlined in this document. A brief explanation or description of some of the capabilities identified in the first section is provided.

1. **Channel Capacity of 160 or Greater**
   Channel capacity refers to the number of preprogrammed radio channels (frequencies) that a two-way radio can hold in memory and be capable of receiving and or transmitting on. Note that channel capacity is not necessarily the same as “Zones and Channels” as

defined by some equipment manufacturers. Zones and Channels refer to a method for grouping a set of radio characteristics such as transmit and receive frequency pairs into a memory location for ease of operation and recall. This feature is required in support of ambulance-to-hospital communications, and public safety interoperability throughout the Commonwealth and nationally.

2. **Channel Display Minimum of 8 Alphanumeric Characters**
   A display capable of providing the user with operational state and or condition such as zone/channel is essential for ease of use of large channel capacity radios. This feature is required in support of ambulance-to-hospital communications, and public safety interoperability throughout the Commonwealth and nationally.

3. **Adjustable Power Output**
   A capability that allows a radio's transmitter output power to be adjusted, on a channel-by-channel basis, which is typically used to compensate for varying coverage or in some cases to prevent harmful interference to other users.

4. **Mil Specifications 810 C, D, E and F**
   Designed and tested to meet the U.S. military standards approval for Shock, Vibration, Rain & Dust, ensuring a device's ability to perform in rigorous work environments such as is encountered in an ambulance.

5. **Narrowband Operation (12.5 KHz)**
   Capable of operating on a radio channel that occupies a bandwidth of 12.5 KHz. To help alleviate the severe shortage of radio spectrum allocated to public safety use, the FCC developed an overall (reframing) strategy for using the spectrum in the private land mobile radio (PLMR) services more efficiently.

   This strategy created a new narrowband PLMR band below 800 MHz, adopted a transition schedule based on the type acceptance process, and determined that the twenty PLMR services should be consolidated. It is essential that all equipment purchased be narrowband-capable.
   The frequency bands affected by the FCC's strategy are as follows:
   - 150-174 MHz - VHF high-band, available nationwide.
   - 421-430 MHz - available only in Detroit, Buffalo, and Cleveland.
   - 450-470 MHz - available nationwide.
   - 470-512 MHz - shared with UHF-TV, available only in 11 cities.

6. **Analog**
   Conventional analog radios process sounds into patterns of continuously varying electrical signals, which resemble the sound waves, and then transmit the signal on a single R.F. carrier wave for reception and processing by a distant receiver.

7. **Flash Upgradeable Software/Firmware**
   Flash upgradeable refers to a device's ability to receive software updates that correct problems and or improve efficiency without requiring replacement of hardware or return

to the manufacturer. Flash upgrades can add capability to a radio, such as enabling encryption or future APCO P25 standards.

8. **APCO Project 25**
   APCO Project 25 (P25) is a set of industry standards for digital mobile radio designed primarily for public safety agencies. The P25 suite of standards involves digital Land Mobile Radio (LMR) services for local, state and national (federal) public safety organizations and agencies. P25 is applicable to LMR equipment authorized or licensed in the U.S., under the National Telecommunications and Information Administration (NTIA) or FCC rules and regulations. P25 compliant systems are being increasingly adopted and deployed. Radios can communicate in analog mode with legacy radios and in either digital or analog mode with other P25 radios. Additionally, the deployment of P25-compliant systems will allow for a high degree of interoperability amongst various public safety entities.

9. **APCO 25 Digital**
   Conventional digital radios process sounds into patterns of electrical signals, which correspond to one of four distinct levels or frequencies, which resemble digits, and then transmit the information on a single R.F. carrier wave for reception and processing by a distant digital receiver.

10. **E.I.A.**
    The Electronic Industries Alliance is a national trade organization that includes the full spectrum of U.S. manufacturers. Accredited by the American National Standards Institute (ANSI), EIA provides a forum for industry to develop standards and publications in its major technical areas.

11. **C.T.C.S.S. and D.C.S.**
    C.T.C.S.S. (Continuous Tone Coded Squelch System) and D.C.S. (Digital Coded Squelch) are sub-audible selective signaling schemes that are used in most analog two-way radio systems. These signals are transmitted along with the R.F. carrier wave and decoded by receivers. The purpose of these systems is to permit different groups of users on the same radio channel to operate without hearing each other, even though they are within reception range. An example is the network of CMED Centers throughout the Commonwealth. An ambulance calling in to Metro Boston CMED, on MED 4N, from the Acton area would most likely be heard by the Northeast and Worcester CMED operators if it were not for C.T.C.S.S. The Motorola name for C.T.C.S.S. is *Private Line* (*PL*).

Optional Recommendations

The following lists of capabilities are recommended for ambulance services desiring enhanced radio capabilities. The capabilities listed are not mandatory and do not directly affect communication interoperability capability.

- Subscriber radio equipment should be capable of transmitting a P.T.T. identification that is compatible with *Motorola MDC 1200* signaling.

- Subscriber radio equipment should be capable of being flash-upgraded for APCO Project 25 conventional digital operation.
- Subscriber radio equipment should be capable of dual control head operation (front and rear of ambulance).
- Subscriber radio equipment, installed in the patient area, should be capable of operating with a headset or handset instead of a microphone and speaker.
- Subscriber radio equipment should be equipped with a heavy-duty, externally-mounted, D.C. power filter that will eliminate or reduce interference, caused by the ambulance's electrical/lighting equipment.
- Subscriber radio equipment should be purchased with the maximum extended warranty that the manufacturer offers.

6.2 CMED Trip Record Tracker

Minimum Requirements

During an EMS transport, EMTs talk to the CMED Center initially and then to a hospital for the purposes including, but not limited to: medical direction, hospital availability and relay of patient conditions. During this communication, CMED Centers capture information about the transport on a trip record.

6.3 CMED Operator Position Equipment

The current CMED Center radio infrastructures, comprised of base stations, switch matrices, and communications consoles, are similar in technology but vary from CMED Center to CMED Center.

Minimum Requirements

Meet needs of the region
Each EMS communications system shall provide sufficient communications to meet the needs of the region.

1. Channel Coordination
The system should provide for sufficient communications capacity to permit advanced units to receive medical control that is free of co-channel interference 80% of the time. In general, this capacity will be added to the system according to the growth of ALS services. The capacity should not be developed to the detriment of the general medical communications needs.

In all cases, utilization shall be as spectrum-efficient as possible while preserving the quality of medical communications.

2. Frequency Utilization

Medical communications will utilize UHF radio frequencies. All systems employing UHF shall provide for VHF cross-patching. VHF systems may exist as VHF-only systems but it is desirable to provide for UHF cross-patching when feasible.

6.4 Massachusetts DPH WebEOC

Description

The Massachusetts DPH WebEOC is a system used to capture and report hospital status to the EMS Systems. The system is also used as an inventory resource for hospital bed availability. If an incident is anticipated to require statewide bed availability resources, EPB on-call person may be contacted via numeric pager at (617-339-8351) 24 hours per day, 7 days per week.

6.5 Health and Homeland Alert Network (HHAN)

Description

As a secure application interfaced with a wide range of devices (e.g. pager, fax, phone, email, wireless), the HHAN provides continuous, secure, bi-directional communication and information sharing in support of aspects of emergency response, including but not limited to, mass casualty incidents, patient surge events or acts of terrorism. HHAN also provides assistance for the following: response planning, educational services, disease surveillance, laboratory reporting, and epidemiologic investigation. The core functionality of the HHAN will provide a secure means to utilize the following:

- a role-based user directory containing the contact information of all appropriate Commonwealth personnel
- user-specific, rapid communication distribution for emergency situations (can alert via phones, fax, email and pager)
- on-line news postings for low priority information dissemination
- on-line training documentation and schedules to ease administrative burden associated with any existing and/or future educational services

Contact Information

Please direct questions to the following:
MDPH, HHAN Administrator at http://mass.gov/dph/emergencyprep

For emergency response only, please contact the EPB on-call person via numeric pager at (617-339-8351).

6.6 Regional Mass Casualty Support Unit (RMCSU)

Description

The EMS community has multiple Regional Mass Casualty Support Units available throughout the Commonwealth. Each RMCSU is a trailer designed to assist in treating approximately fifty

(50) adult patients and twenty-five (25) pediatric patients. Collectively, each region has essentially enough supplies to assist in treating approximately 150 casualties.

The trailers are registered to the Regional EMS Councils, who are responsible for maintaining the trailers. The organizations hosting the trailers are contracted to provide staffing for them in the case of a deployment.

Trailer Activation

See the protocol section for details on the process used to deploy these trailers.

Trailer Dispatch Contacts

See Appendix K for Trailer Contacts.

6.7 Ambulance Task Force Radio Infrastructure/ FAMTRAC

Description

The Ambulance Task Force radios operate on the VHF infrastructure operated by the Massachusetts Emergency Management Agency (MEMA). The VHF infrastructure contains nine (9) regional repeater sites, providing statewide coverage.

The map in Appendix L provides a visual representation of the geographic distribution of the repeater sites in addition to the radio coverage area for each.

This radio infrastructure provides statewide coverage so that ambulance leaders within an Ambulance Task Force can communicate as they travel across the Commonwealth.

6.8 Ambulance Task Force Radios

Description

MDPH, the Department of Fire Services, DCR, and MEMA have collaborated to build out the tower infrastructure and supply radio equipment that uses the VHF (150MHz) frequency range.

To this end, 136 VHF mobile radios (model VX-4204) and accompanying tactical radio cases were purchased in 2005. This radio hardware allows responders to utilize the VHF (150MHz) radio system to communicate while they are moving around the Commonwealth.

Radios were issued to all Ambulance Task Force leaders and alternate leaders. Each Regional EMS Office keeps two radios to serve as replacements for any that need service. The remaining radios have been distributed to the following organizations:

- MDPH – 2 radios

Contact Information Furthermore, any radio issues, problems, and/or concerns should be directed to the MEMA Communications Unit.

6.9 MDPH-Approved Regional Communications Plans

Minimum Requirements

MDPH-approved Regional EMS Communications Plans augment the State Plan and address the following:

- Call Signs
- Communication Failure Protocols
- Cell Phone Usage
- Hardwire Usage
- Entry Notification
- Medical Control
- MCI Operation
- Usage of Med Channel 9N, 9-2 & 10N, 10-2

6.10 Local EMS Dispatch Radio Networks

Minimum Requirements

In all cases an "EMS channel" identified by this plan is intended for communications of EMS operations with the exception of those that are designated as “Interoperable channels” by this plan and in occurrence with the Regional EMS Communications Plan.

Utilization of MED 9, 9-2, 10, 10-2 shall be restricted to usage as designated in the appropriate regional communications plan for interoperability. The exception will be the authority of the region to approve the use of Med 9N and Med 10N within their boundary for dispatch purposes upon special request.

Mobile relays that are free-standing with access by only mobiles, portables, or control stations are not acceptable. CTCSS or a similar technology shall be used (carrier activated systems are not acceptable).

Utilization of MED 9N, 9-2, 10N,10-2 shall be restricted to usage as designated by the region for interoperability. MED 9N and 10N may be allocated on special request as an emergency dispatch channel.

6.11 Hospital Phone Network

Description

Each EMS Region may have alternative communication systems identified in their regional communication plan. Please refer to the regional communication plan for guidance.

7 Radio Communication Protocols

This section describes some chosen protocols used within the EMS community. Most of the protocols represent a high-level outline that each region may use as a guide; however, each region may have protocols that deviate from those of this plan. Those regional specific protocols should be included in an appendix to this document. Furthermore, Radio Systems utilized to contact CMEDs must be compliant with the published EMS Radio Channel Plan.

7.1 Call Sign Identification

The call sign scheme will be determined at a regional level until a statewide scheme is agreed upon.

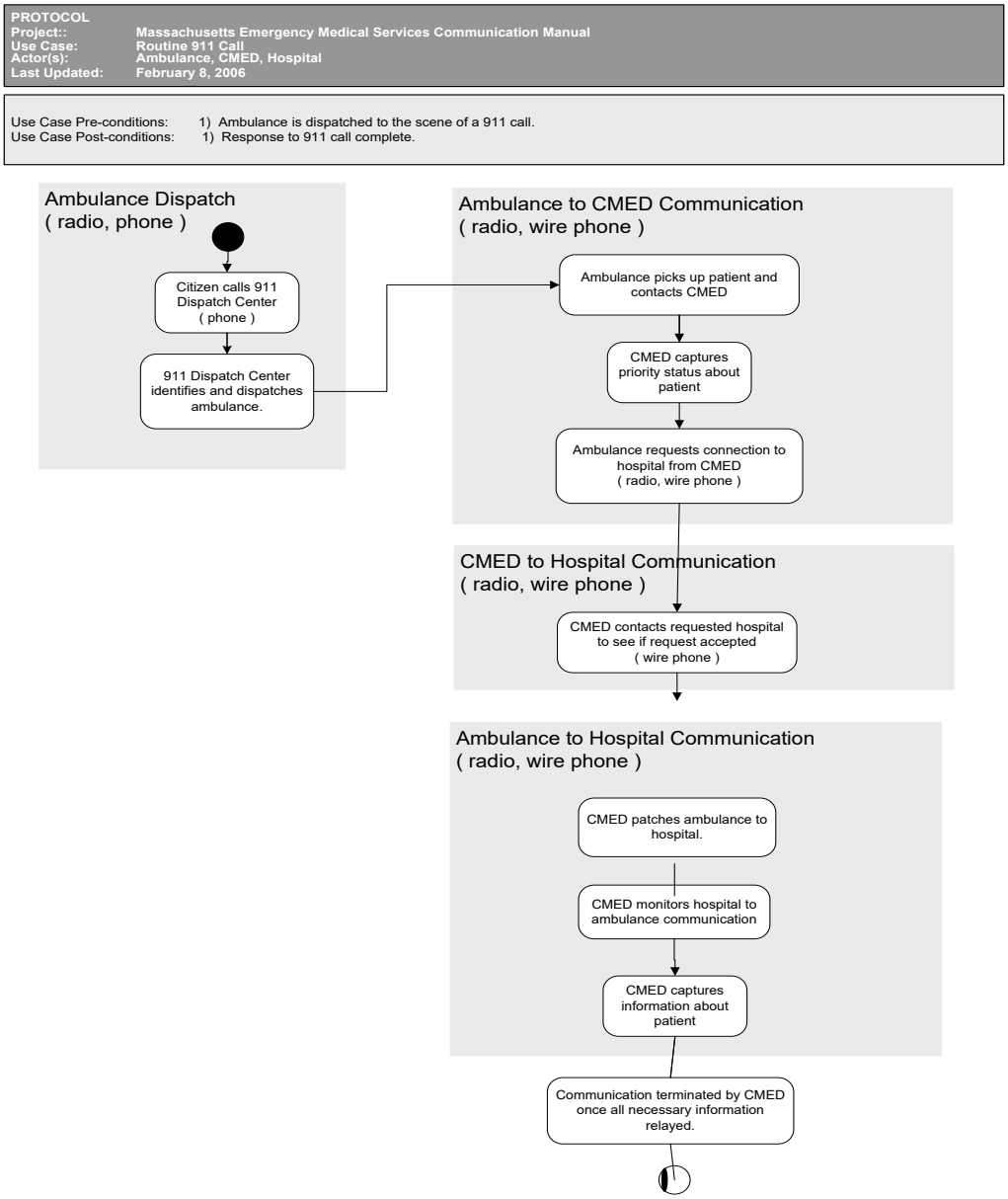
However, at a minimum, the call sign must include a designation for the town of the ambulance (either text or number) and then a designation for the actual ambulance itself.

7.2 Typical 9-1-1 Call Response

This section describes the high level protocol used to respond to calls. This protocol is a general description –**regional communications plan** may include protocols that deviate slightly.

Participants:

- PSAP
- Dispatch Center
- Ambulance
- CMED
- Hospital



7.2.1 Citizen calls 9-1-1 Public Safety Answer Point (PSAP)

EMS effectiveness hinges on the ability of citizens to rapidly access appropriate EMS resources. The general public must be able to recognize a medical emergency and then rapidly call the telephone number for the local EMS agency. The most effective route is the universal emergency number 9-1-1. The second best route is a ten-digit number established by local authorities for EMS, fire and police access.

Ambulance services that provide primary EMS response to a jurisdiction with 9-1-1 shall utilize that system for EMS access. This shall include 9-1-1 advertising as required by 105 CMR

170.265(B). All other services shall comply with 105 CMR 170.265 using a ten-digit access number.

7.2.2 Public Safety Answering Point (PSAP) contacts Ambulance Dispatch Center

Public Safety Answering Points (PSAPs) , in accordance with State 911 Department regulations may forward requests for medical services to Ambulance Dispatch Centers, which in turn dispatch the appropriate EMS units and field personnel in response. Both telecommunications must log information regarding the event.

7.2.3 9-1-1 Dispatch Center identifies and dispatches ambulance

After answering a call, the 9-1-1 Dispatch center, shall dispatch an ambulance and any other resources to the scene, in accordance with the local service zone plan. Each Region of the Commonwealth executes 9-1-1 and ambulance dispatch differently.

7.2.4 Ambulance picks up patient and contacts hospital

EMTs may initiate communication with the hospital through the CMED center, by hailing the center on the common calling channel of the CMED radio network, or by such alternate means supported by the hospital.

7.2.5 If CMED is used, CMED captures priority status about patient

Standardization of terminology provides greater efficiency of CMED for the purpose of coordinating patient transport activities. Patients are triaged and assigned the following designations – ***Priority One through Priority Four***:

PRIORITY ONE (Immediate Life Threatening)
Immediately connect to medical control, override other traffic as needed.

Examples are:

- Cardiac Arrest
- Unstable Cardiac
- Major Head Injuries
- Multiple Trauma
- Unstable GI Bleed
- Acute Pulmonary Edema
- Respiratory Arrest
- Airway Obstruction
- Anaphylaxis

PRIORITY TWO (Life Threatening)
Connect as soon as possible to receiving facility.

Examples are:

- Suspected Cardiac
- CVA
- Coma (unknown etiology)
- Unstable Trauma
- Unstable Medical (e.g., hypoglycemia)
- Symptomatic Cervical Injuries
- Suspected Fractures/Dislocations of Joints

PRIORITY THREE (Non-Life Threatening)
Connect to receiving facility as soon as med channel is available.

Examples are:
Stable Trauma:

- Minor Lacerations and Soft Tissue Injuries
- Suspected Minor Fracture without Circulatory or Nervous System Compromise

Non-Acute Medical Complaints

PRIORITY FOUR (Stable)
Connect only if no other traffic requires a channel.

Examples are:

- Non-emergent inter-facility Transfers
- Direct Admissions

7.2.6 Ambulance requests connection to hospital

Transporting EMS units may call a regional CMED Center to request a communications patch to a hospital's emergency department. If they do so, the CMED Center then designates and assigns an available communications channel and updates it as required. Once the patch is activated, ambulance personnel have a dedicated communications link with the medical control point. The system configuration allows efficient dynamic assignment of base stations/frequencies and the coordination of EMS resources.

7.2.7 If CMED is used, CMED patches ambulance to hospital

See flow chart on page 25 for detail description.

7.2.8 If CMED is used, CMED monitors hospital to ambulance communication

See flow chart on page 25 for detail description.

7.2.9 Hospital captures information about patient

See flow chart on page 25 for detail description.

7.2.10 Communications terminated once all necessary information relayed

- Age
- Sex
- Chief Complaint
- Vital Signs
- Medical care
- Unit
- Priority
- ETA

7.3 Ambulance Task Force Activation

Summary:

This section describes the high-level protocol used to activate an Ambulance Task Force. This protocol is used state-wide for all Ambulance Task Force activations.

Participants:

- Incident Command
- Local Dispatch Center
- Mutual Aid District Control Centers (sending and receiving)
- MEMA
- MDPH EPB
- CMED
- District Mobilization Coordinators
- Regional EMS Executive Directors or designee
- Ambulance Task Force leader(s)
- Ambulance Task Force members

Infrastructure Used:

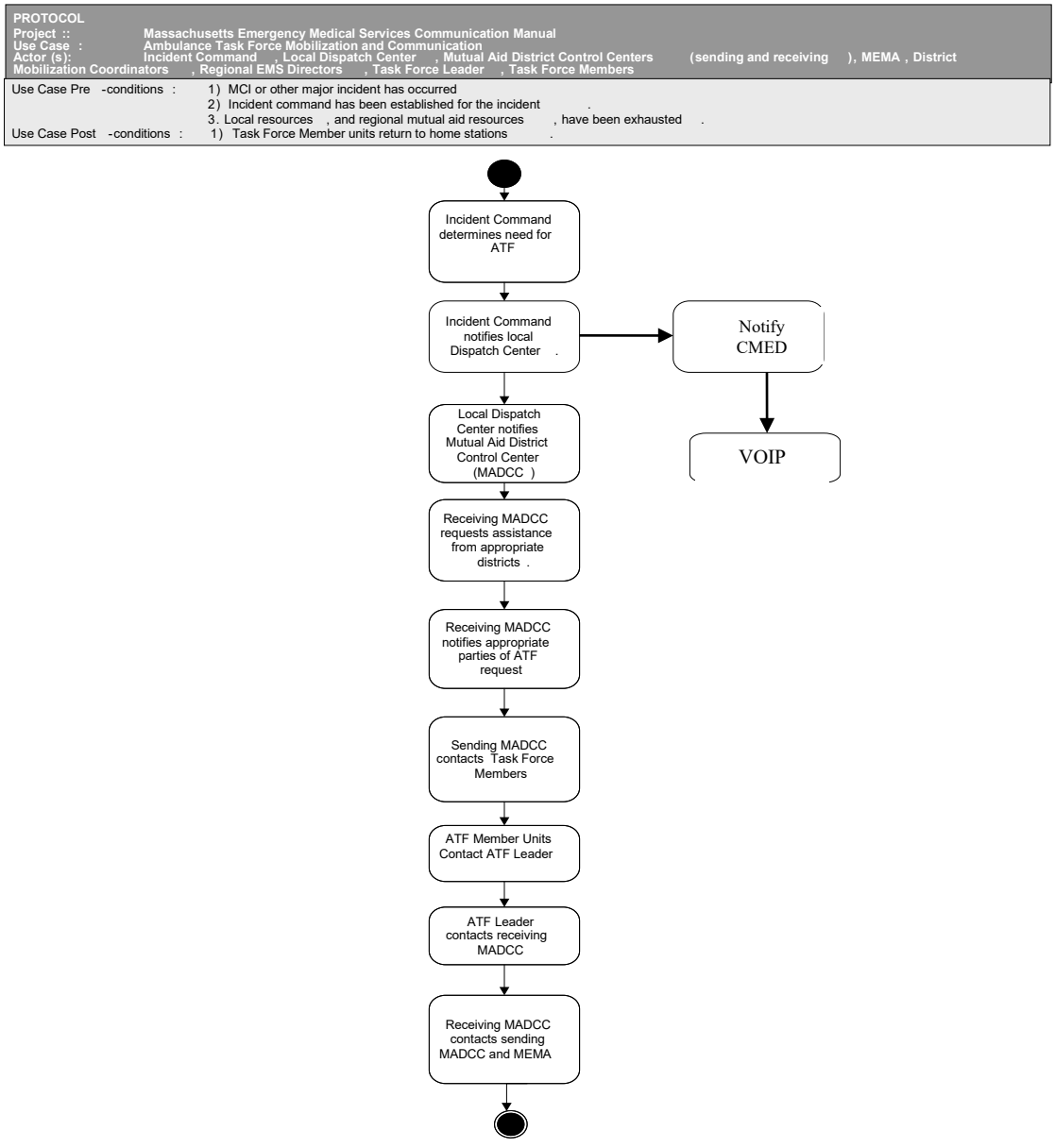
- 150 MHz VHF Radio Network
- Other Radios
- NAWAS Phone System

- Cellular Phones
- Land Line Phones

Infrastructure Flowchart:

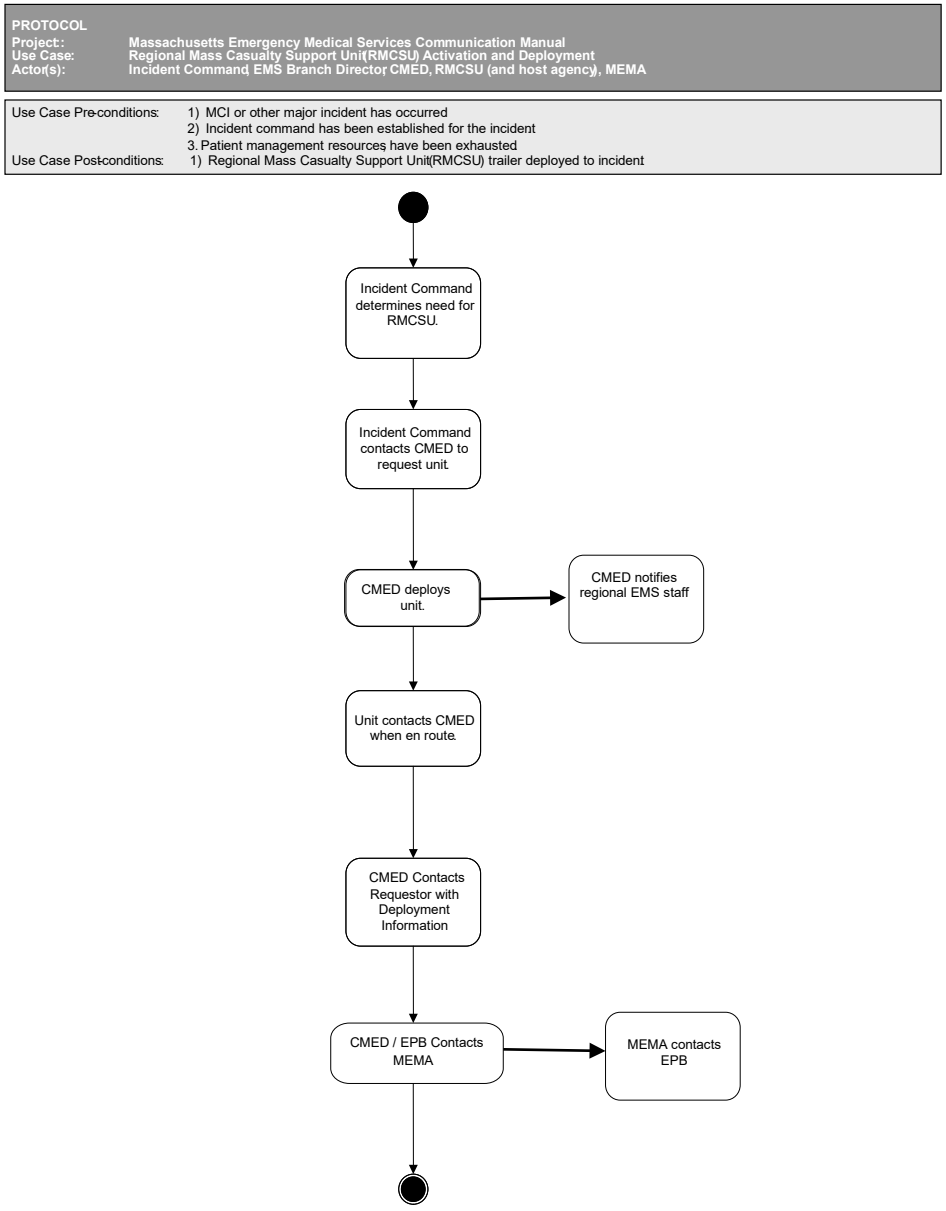
The following page contains a flowchart of the high-level activation protocol.

For complete details, please see the Commonwealth of Massachusetts State Fire and Emergency Medical Services Mobilization Plan.



7.4 Regional Mass Casualty Support Unit Activation

The following summarizes the official protocol for the deployment of all Regional Mass Casualty Support Unit in the Commonwealth.



7.4.1 Incident Command Determines Need for RMCSU

An incident commander or designee on scene may determine the need for an RMCSU trailer.

7.4.2 Incident Command Contacts CMED to Request Unit

The EMS Branch Director may contact the CMED if authorized by the incident Commander (IC). If so, the IC will be informed of the deployment. The requestor (Incident Commander or EMS Branch Director) will also inform the Staging Manager that the equipment will be arriving and where it will be needed.

7.4.3 CMED Deploys Unit

The CMED Operator identifies the unit nearest the incident and dispatches that unit to the incident. If the closest unit is not within that Region, the CMED operator will follow inter-region agreements and policies to attempt to deploy a resource from another region. Depending on the nature and scope of the incident, CMED may place a second unit on standby or deploy a second unit as a redundant response.

CMED notifies regional office staff.

7.4.4 Unit Contacts CMED when En Route

The RMCSU unit staff contacts the CMED en route to the incident.

7.4.5 CMED Contacts Requestor with Deployment Information

Once informed the unit is en route to the incident, CMED will contact the Incident Commander or EMS Branch Director via radio or phone and provide an estimated time of arrival.

7.5 Medical Control

Medical communications include those messages between EMTs, physicians, nurses and CMED operators required to care for the patients. Most common is the communications between hospital and EMTs for entry notification and/or medical control consultation for clinical advice and orders prior to a patient's arrival at the hospital. The EMS radio systems shall be capable of meeting the needs of this frequent medical communication.

A special form of this medical communication is between the EMT (most often, but not limited to, EMT-Paramedics) and a physician at their EMS service's affiliate hospital for purposes of medical control. Although such communications are less frequent than basic medical communications, medical control demands careful consideration for all systems. Medical control requires more air time due to the quantity of information and instructions exchanged. Communications must be established rapidly and maintained in order that the patients who receive care can benefit from it, since under the Statewide Treatment Protocols, EMTs may perform certain procedures only with medical control approval. Finally, portable radios are used during most of the patient care phases of medical control communications. EMS systems shall, at a minimum, provide Advanced Life Support ambulances with sufficient communication capacity to provide a channel for medical control communication that will be free of harmful interference throughout the entire period of the case 80% of the time.

7.6 Medical Aircraft Communication

Activation and communication protocols are part of the emergency response network that medical aircraft must follow.

8 References

1) The Plan is consistent with the Rules and Regulations of the Federal Communications Commission and, in accordance with Title 47 CFR 90.35(b), is on file with the Commission.

2) RCC report

3) Old Communications Plan

4) Regulations

Appendices

8.1 Appendix A: Glossary of Terms and Acronyms

ANTENNA

A component of a radio which emits and/or receives the radio frequency radiation. It is connected to the radio set itself. Antennae are placed in high locations, when possible, in order to achieve maximum performance.

ALS

Advanced Life Support

BAND

A portion of the radio frequency spectrum; such as VHF high band: 150 MHz to 173 MHz.

BASE STATION

A radio transmitter/receiver in a fixed location used to communicate with mobile units. Commonly located in remote locations close to the attached antenna.

BASE STATION REPEATER

A base station that operates as a mobile relay but has dedicated control from a control point. See mobile relay.

BLS

Basic Life Support

CDC

Centers for Disease Control and Prevention

Central Medical Emergency Direction Center (CMED Center)

A communication center that coordinates EMS communications in a region or an area.

CHANNEL

A specific radio path that is employed by users when they communicate. A channel may consist of a single frequency or a group of frequencies (oftentimes a pair).

CONTROL POINT

The location from which a base station is primarily controlled.

CONTROL STATION

A radio transmitter/receiver in a fixed location intended to be used for communicating with another fixed station such as a mobile relay.

CRITICAL CHANNEL

A UHF radio channel designated for most frequent use by a CMED system. Refer to the State Communications Plan for information concerning channel utilization policies.

CTCSS (CONTINUOUS TONE CODED SQUELCH SYSTEM)

A squelching feature used by most radio systems that permits only transmissions that contain a specific "sub-audible" tone to be heard. Radios in such systems are designed to transmit a continuous tone code that activates the squelch circuit of the receiving radio. Radios on the same frequency but with different tone codes will not be able to hear or talk to one another unless the CTCSS is disabled in both units. (Often this can be accomplished by operating a "monitor" button.) UHF EMS systems in New England use a dual CTCSS system. CTCSS is described by various trade names: Channel Guard, CG, (General Electric); Private Line, PL, (Motorola); and others.

DECODER

The opposite of an encoder. See encoder.

DEDICATED LINE

A special type of telephone line typically used as a radio control circuit; not a part of the public switch telephone network (PSTN).

DHCQ (DIVISION OF HEALTH CARE QUALITY)

A division of the Department of Public Health whose responsibilities include the inspection and licensing of health care facilities such as hospitals, and in particular as relates to EMS, licensing of hospitals for the service of providing medical control to ambulance services.

DISPATCH CENTER

A request for services is received and appropriate medical resources are deployed.

DTMF (DUAL TONE MULTI-FREQUENCY)

A tone signaling system that uses a pair of tones in combination and are used to control or access equipment; currently used chiefly to access hospital or CMED

radios on the VHF frequencies. Also called "Touch Tone" since it is identical to telephone signaling system.

DUPLEX

A feature of telecommunications that allows equipment to transmit and receive simultaneously. The opposite of simplex. Duplex may refer only to equipment or it may also refer to operations. The latter would permit two users to speak simultaneously. In EMS, duplex operations are sometimes referred to as the "doctor interrupt" feature.

ED

Emergency Department

EKG

Electro-cardiogram (also ECG). A chart of the electrical signals recorded from a person's heart.

EMS

Emergency Medical Services

EMT

Emergency Medical Technician encompasses basic and immediate paramedic.

ENCODER

A component of a radio that applies a signal to a transmission, usually in order to access another unit. A decoder in the other unit "listens" for the proper signal or code. DTMF and CTCSS all employ encoders and decoders.

EOC

Emergency Operation Center

EPB

The Emergency Preparedness Bureau (EPB) within MDPH provides guidance and technical assistance about emergency preparedness and emergency management activities.

ERP (EFFECTIVE RADIATED POWER)

The power supplied to an antenna multiplied by the relative gain of the antenna in a given direction.

ESFs

Emergency Support Functions

ESF-8

Emergency Support Function for Health and Medical Services

FCC (FEDERAL COMMUNICATIONS COMMISSION)

The Federal Communications Commission (FCC) is an independent government agency, directly responsible to Congress. The FCC is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. Their jurisdiction covers the 50 states, the District of Columbia, and U.S. possessions.

FREQUENCY

The specific measurement of a signal, expressed in Hertz (cycles per second). In common usage, similar to channel.

HHAN

Health and Homeland Alert Network

HAZMAT

Hazardous Materials

H.E.A.R. RADIO (HOSPITAL EMERGENCY AND ADMINISTRATIVE RADIO)

Commonly used to refer to the VHF radio channel 155.340/155.280/155.385/155.400 which became the primary EMS channel prior to the development of UHF radio for EMS. H.E.A.R. is a trade name of the Motorola Corp. The channel, and the acronym, is still widely used.

Hz (HERTZ)

Cycles per second per second. Signal frequencies are expressed in hertz or multiples: kHz=kilohertz or 1,000 cycles per second; MHz=megahertz or one million cycles per second. 155.340 MHz=155,340,000 cycles per second.

IC

Incident Commander

ICS

Incident Command System

INTERFERENCE

HARMFUL -Radio emissions, radiation, or induction which specifically degrades, obstructs or interrupts the communications of other users.
NUISANCE -Radio emissions which present to a user of a radio channel that distracts, annoys, or disturbs that user but does not cause harmful interference.
CO-CHANNEL -Interference associated with a user on the same frequency as the user experiencing the interference.
ADJACENT CHANNEL -Interference associated with a user on a frequency just above or below the frequency of the user experiencing the interference.

INTERCONNECTION

Connection or interface of private radio systems with the facilities of the public switched telephone network (PSTN), i.e. the conventional dial network, to permit the transmission of signals between points of the PSTN 's and the private radio system. In common EMS use, a "phone patch" is interconnected and FCC rules require positive control of the patch by a control point (CMED). Dedicated lines or ring-down lines are not part of the PSTN and therefore do not constitute interconnection.

INTEROPERABILITY

The Federal Communications Commission has adopted the following definition of interoperability. Interoperability is defined in Section 90.7 of the Commission's rules as "[a]n essential communications link within public safety and public service wireless communications systems which permits units from two or more different entities to interact with one another and to exchange information according to a prescribed method in order to achieve predictable results."

LAND MOBILE RADIO

As defined by the FCC, all two-way radio facilities whose primary use is for private communication between mobile units and base stations.

MCI

Mass (or multiple) casualty incident

MDPH

Massachusetts Department of Public Health

MED CHANNEL

EMS channels in the UHF band are labeled by "MED #" by common usage and FCC Rule. MED 1N through MED 8N and MED 12 through MED 82 are utilized for medical communications withMED 4N as the common calling channel. MED 9N and MED 10N may be used as dispatch channels if approved by regional EMS office and Med 9-2 and 10-2 are strictly mutual aid and interoperability channels.

MICROWAVE

Extremely high radio frequencies, usually above 1 GHz (gigahertz=1,000 megahertz=one billion hertz) that are used for fixed point communications. Microwave links are capable of simultaneously transmitting many, many separate communications signals along a single path.

MMRS

Metropolitan Medical Response Systems

MOBILE

A radio unit that is installed in a vehicle. A mobile unit consists of an antenna, a control head and the radio set. The latter item is usually located in an out of the way spot such as behind a front seat.

MOBILE RELAY STATION

A base station that automatically retransmits signals received from mobile units or control stations. Commonly called a repeater, the name refers to its purpose of relaying communications between mobile or portable units. A mobile relay may be free standing at a remote site or be controlled directly by a control point (see base station repeater).

MOBILE REPEATER STATION

A mobile radio that automatically retransmits signals received from portable units. In EMS use, a mobile repeater is used by EMTs to communicate to a hospital or CMED while away from the ambulance. Such units are necessary in areas in which standard portables are not powerful enough to reach a base station directly. Mobile repeaters have the effect of boosting a portables' range. {Note: Mobile repeaters are not compatible with all systems. Great care must be used in their acquisition and in operation.}

MOU

Memorandum of Understanding

NIMS

National Incident Management System

OEMS

The program within the Department of Public Health that is charged with licensing ambulance services, certifying EMTs and ambulance vehicles and accrediting EMS training institutions within the Commonwealth. OEMS also develops, implements and enforces regulations, administrative requirements and other policy for EMS in the Commonwealth; develops and updates the Statewide Treatment Protocols governing scope of practice and clinical care of EMTs in Massachusetts; coordinates EMS communications, and reviews and approves local service zone plans for EMS delivery in the Commonwealth. OEMS also administers federal grants that contribute to the EMS community.

PAGING

One-way radio transmission characterized by tone activation of small radio receivers (pagers). Used for alerting personnel.

PATCH

A method to connect two parties who require communications who otherwise cannot communicate directly. Common EMS usage refers to an ambulance being "patched" by a CMED to one or more hospitals. Cross-channel patching refers to the connecting of one radio channel to a separate radio channel. Telephone patching refers to radio to telephone connections; also called interconnection.

PORTABLE RADIO

A type of mobile unit that can be carried. Portables are less powerful than a mobile and thus poorer communications can be a problem. Also see mobile repeater.

PSAP (PUBLIC SAFETY ANSWERING POINT)

The location in a specified jurisdiction where all emergency requests are answered. The place where a telephone is answered when a person calls 9-1-1. It may or may not be the location from which EMS, fire or police units are dispatched.

PTT SWITCH (PUSH-TO-TALK)

A switch on a microphone or handset that activates a radio's transmitter when depressed.

REMOTE CONTROL CONSOLE

A piece of radio equipment that controls a base station. Typically hospitals have "remotes" located in their emergency departments.

REGIONAL EMS COUNCIL

An entity created pursuant to M.G.L. c. 111C, §4 and designated by the Massachusetts Department of Public Health (MDPH) to assist the MDPH in establishing, coordinating, maintaining and improving the EMS system in a geographic area of the state defined by MDPH for EMS planning purposes.

REGULATIONS – EMS System

These regulations can be found at the following links: http://www.mass.gov/?pageID=eohhs2terminal&L=5&L0=Home&L1=Government&L2=Laws%2c+Regulations+and+Policies&L3=Department+of+Public+Health+Regulations+%26+Policies&L4=Regulations+and+Other+Publications+-+E+to+H&sid=Eeohhs2&b=terminalcontent&f=MDPH_regs_emergency_services&csid=Eeohhs2

REPEATER

A radio which is designed to automatically re-transmit a signal received from another unit. See mobile relay, mobile repeater, and/or base station repeater. In common usage, repeater refers to a mobile relay.

SEOC

State Emergency Operations Center

SIMPLEX

A feature of telecommunications that restricts equipment to transmit or receive. The opposite of duplex. Users of a simplex system cannot interrupt a user while he/she is transmitting commonly referred to as "push to talk, release to listen."

SQUELCH

An electronic feature of a radio which eliminates unwanted noise or signals from the loudspeaker. Standard squelching operates when there is no carrier on the frequency present at the receiver.

TALK IN

A reference to a mobile or portable radio's ability to be received by a base station.

TALK OUT

A reference to a base station's ability to be received by a portable or mobile unit.

UHF (ULTRA HIGH FREQUENCY)

The portion of the radio spectrum between 300 MHz and 1.000 MHz (1 GHz). UHF EMS communications use frequencies in the 460 MHz portion of the UHF band.

VHF (VERY HIGH FREQUENCY)

The portion of the radio spectrum between 30 MHz and 300 MHz. Two-way radio VHF is further broken down into low band (30 MHz -50 MHz) and high band (150 MHz -174 MHz). Most EMS VHF frequencies are in the 155 MHz portion of the VHF band.

WATT

A measurement of power; used in expressing the power output of radios.

8.2 Appendix B: Ambulance Task Force Radio Profiles

VHF RADIO	A	B	C
1	R1 BOSTON	DCR STATEWIDE	VCALL10
2	R1 AMESBURY	DCR BREWSTER	VATC11
3	R1 FRAMINGHAM	DCR PLYMOUTH	VTAC12
4	R1 TEWKSBURY	DCR SHARON	VTAC13
5	R1 TACTICAL	DCR ANDOVER	VTAC14
6	R2 PILGRIM	DCR WACHUSETT	VFIRE21
7	R2 PLYMOUTH	DCR MENDON	VFIRE22
8	R2 BRIDGEWATER	DCR PELHAM	VFIRE23
9	R2 (TBD)	DCR MONTEREY	VFIRE24
10	R2 TACTICAL	DCR WINDSOR	VFIRE25
11	R3 ADAMS	DCR DIRECT	VFIRE26
12	R3 AMHERST	DCR FIREGROUND	VMED28
13	R3 WESTBORO	DCR FIRE 13	VMED29
14	R3 (TBD)	DCR FIRE 14	VLAW31
15	R3 TACTICAL	DCR REC 15	VLAW32
16	SW TAC 16	DCR FIRE COMPACT	VTAC36

Weather					
Ch	**Alias**	**Transmit**	**PL**	**Receive**	**PL**
1	WX 1	None	None	162.55	CSQ
2	WX 2	None	None	162.400	CSQ
3	WX 3	None	None	162.475	CSQ
4	WX 4	None	None	162.425	CSQ
5	WX 5	None	None	162.450	CSQ
6	WX 6	None	None	162.500	CSQ
7	WX 7	None	None	162.525	CSQ

8.3 Appendix C: Hospital Satellite Phone Protocols

As part of cooperative agreement funds awarded from the federal ASPR National Bioterrorism Hospital Preparedness Program, MDPH purchased satellite phones and accompanying service for use by the Commonwealth's hospitals, EMS CMED centers and selected partner organizations. These satellite phones will be part of the Hospital Communications Network and will enable each of the recipients to communicate via satellite connections that are much more stable and reliable than commercial telephone service. MDPH, hospitals, EMS Regional Directors and CMED Centers will be able to use these satellite phones as an additional method of communication during emergencies, when conventional phone services (landlines and wireless) may be unavailable.

The objective of the Hospital Communications Network is to establish a mechanism of communication between MDPH, Massachusetts hospitals, regional communications centers, state agencies and other responding agencies/supporting units in the event of a disaster requiring coordinated hospital communications and response. MDPH intends to deliver special alerts from the MDPH Health and Homeland Alert Network (HHAN) to hospitals via the phone devices. **Note: The phones are not replacing existing traditional hospital, CMED or EMS communication systems. They will provide redundant communications to aid in the dissemination of information to various parties during emergencies.**

Roles and Responsibilities of Different Parties

Massachusetts Department of Public Health
During a disaster, MDPH's role is to utilize the communications network, including the satellite phones, in acting as a communications liaison between hospitals, the Hospital Association, state health officials and federal health resources to provide assistance and support as needed. During non-emergency operations, MDPH's role is to coordinate and participate in testing and exercises.

The EPB will use the satellite phones to issue alerts and updates from the Massachusetts Health and Homeland Alert Network (HHAN) using both text messaging, and the automated voice broadcast communicator functions.

EMS Regional Directors and CMEDS will participate in the communication network on a standby basis for emergency communications and routine testing (24/7/365), and participate in any drills and/or exercises.

Hospitals

Each hospital's role during non-emergency operations is to function as a participant in the communication network on a standby basis for emergency communications and routine testing (24/7/365) and to participate in any scheduled exercises. Participating in routine drills will help familiarize staff with the phones use and increase proficiency in the event of a true emergency.

During a disaster, each hospital's role is to ensure that each satellite phone is powered by a functioning emergency power source; and standby for satellite communications with EPB, MHA or other Network emergency response agencies.

Hospitals are expected to inform EPB in writing of general or widespread reception problems with the phones; EPB will then report these to Globafone.

Barring disruption in satellite phone service, Hospitals must ensure that the phone is operational 24/7/365.

Hospitals must ensure that the phone volume is sufficiently high to receive any calls or alerts. These phones should be used for disaster preparedness and response purposes only.

Emergency Communications

Guidelines

As stated, the satellite phone network will not replace existing methods of emergency response communications, but is available for use as a redundant mechanism and for relaying communications during an emergency.

In the event of an emergency involving one or more hospitals, hospitals can use the satellite phone network to coordinate resources and response between and among hospitals and other involved agencies.

The organization that first becomes aware of the incident or is closest to the incident should initiate a call to the appropriate organization (e.g., EPB, MEMA, etc.). In the event of a major emergency, hospitals can use this communication system to augment their disaster plan.

To initiate an emergency call, follow these guidelines:

Contact EPB using the contact information provided below, with any healthcare related disaster.

Begin all emergency satellite phone calls by self-identifying the facility from which you are making the call. Identify whom you are calling. For example, "this is Boston Medical Center contacting the Department of Public Health."

Use of any part of the Hospital Communications Network is warranted when an incident commander declares a mass casualty incident, a major disaster, or needs to relay vital information to the EPB other hospitals or healthcare partners regarding an emergency.

Useful Contact Information:

MDPH 24/7 numbers:
Epidemiology and Immunization – 617-983-6800
General State Lab-based programs – 617-983-6200 or 617-522-3700

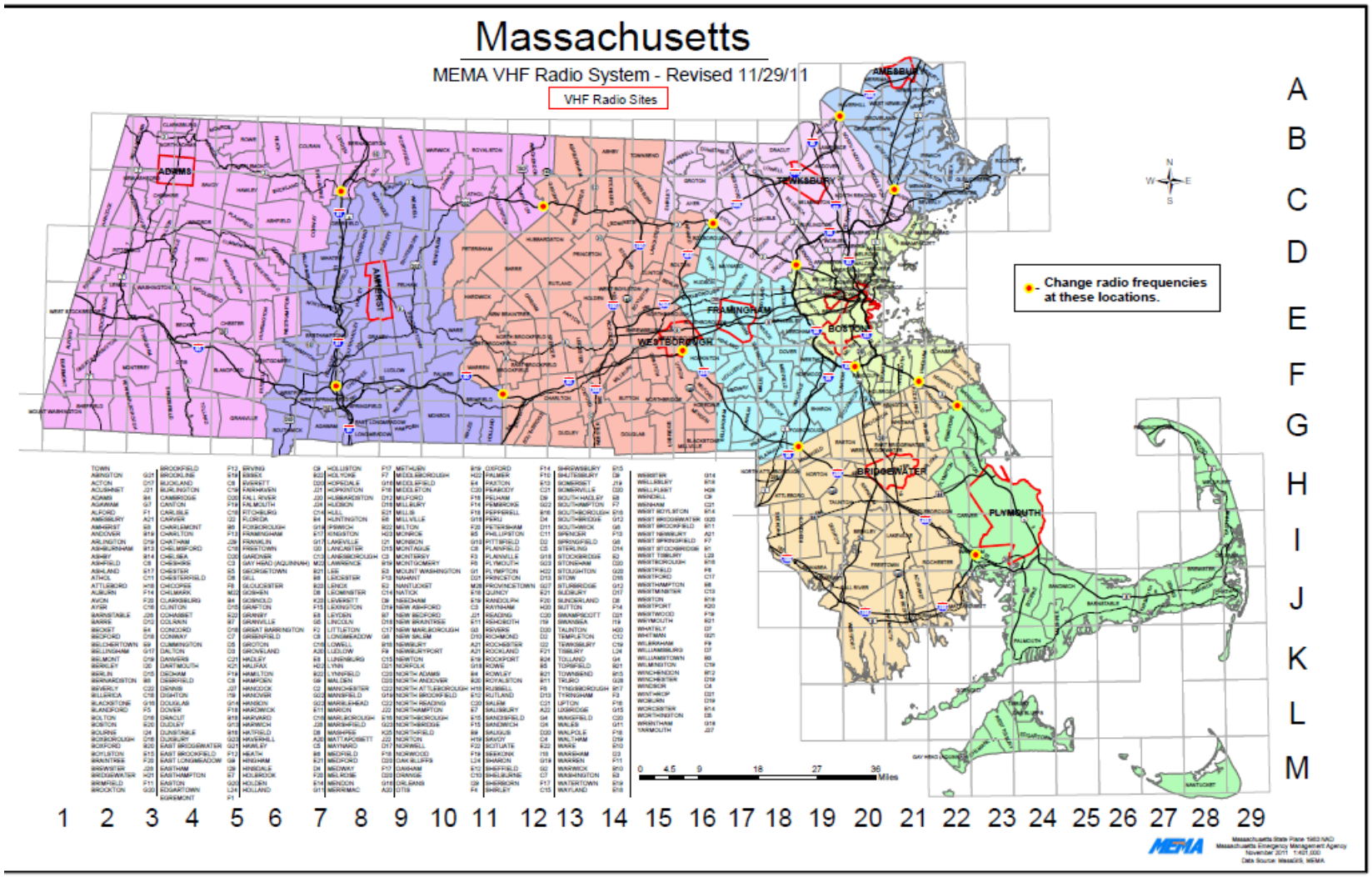
Bioterrorism Incidents – 617-590-6390
Chemical Incidents – 617-590-7361
Division of Health Care Quality – 617-363-0755
MDPH Globalstar Satellite Phone – 254-219-4398
EPB – 617-647-0343
MEMA – 508-820-2000. You may ask for the MDPH-staffed, ESF-8 desk, if the emergency operations center at MEMA has been activated.

8.4 Appendix E: EMS Regional Contact Information

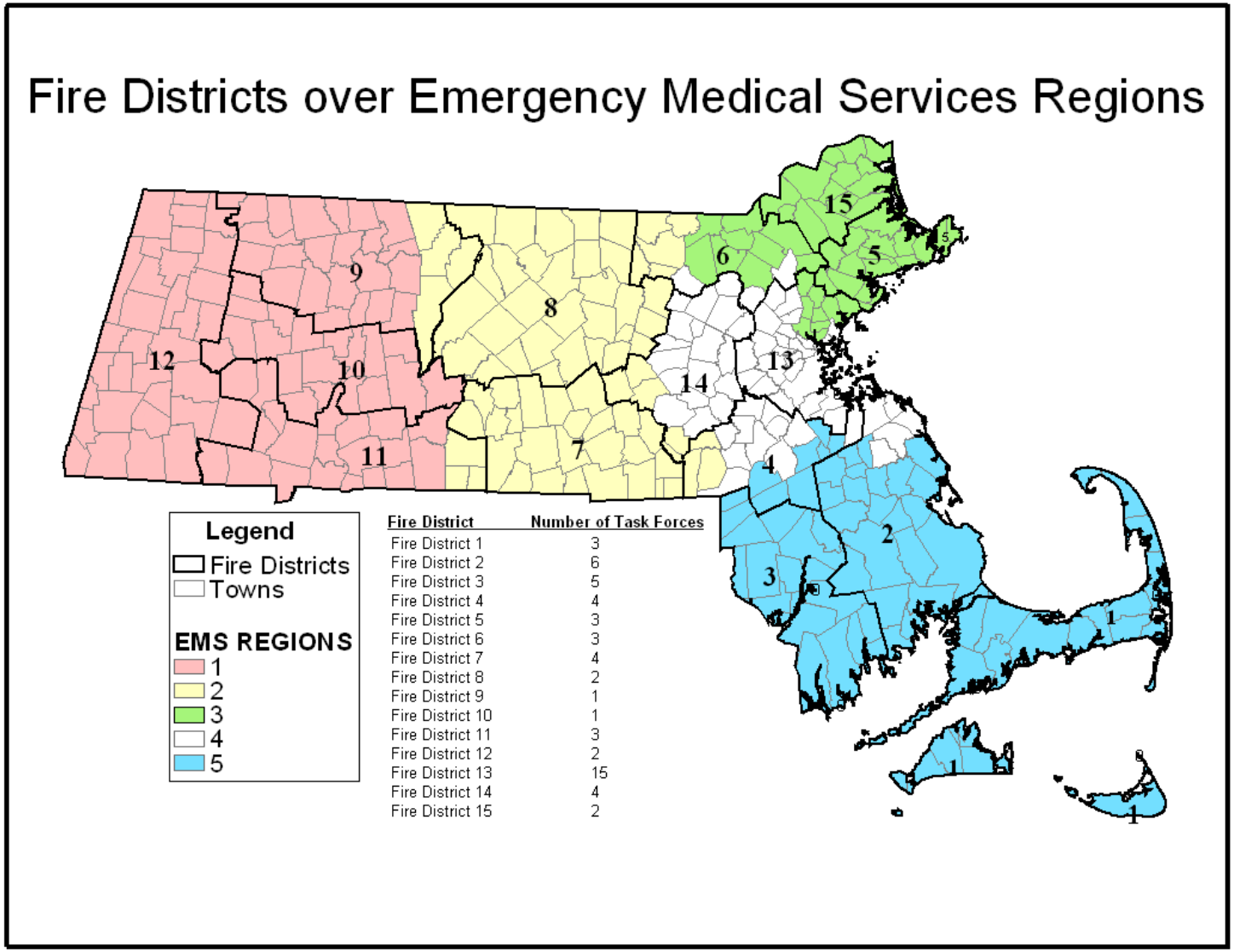
MSV EMS/CMED Satellite Phones - TO BE USED IN THE EVENT OF LAST RESORT

Account Owner	ESN	Fixed Site	Assignment	MSV Phone	MSV Dispatch ID	Primary TAG	TAG Member
MADPH	16405336	FALSE	DPH	888-201-1244	1543	2	
MHA	16400957	FALSE		800-411-9341	XX60	3	
MHA	16400701	FALSE		877-250-8507	XX59	3	
MADPH	16402009	FALSE	DPH	888-824-4927	1498	2	
MHA	16400585	FALSE	SSG	877-621-6949	XX58	3	
MADPH	16401018	FALSE	DPH	888-891-1615	1522	2	
MADPH	16400748	FALSE	Region V	888-891-1614	1505	2	
MADPH	16401913	FALSE	Region III	888-891-1608	1501	2	
MADPH	16405424	FALSE	Region I	888-891-1606	1499	2	
MADPH	16401572	FALSE	Region IV	888-891-1613	1503	2	
MADPH	16401960	FALSE		888-891-1611	1502	2	
MADPH	16401087	TRUE	Region II Worcester	877-298-8593	1489	2	
MADPH	16401595	TRUE	Region IV Boston	877-298-5322	1490	2	
MADPH	16401700	TRUE	Region I Springfield	888-244-4921	1490	2	
MADPH	16400793	TRUE	Region III Lawrence	888-824-4922	1494	2	
MADPH	16402252	TRUE	Region V Bristol	888-824-4923	1495	2	
MADPH	16401069	TRUE	Region V Barnstable	888-824-4924	1496	2	
MADPH	16400513	TRUE	Region V Plymouth	888-824-4926	1497	2	

8.5 Appendix F: FAMTRAC Coverage Map



8.6 Appendix G: Fire over EMS Region Map



8.7 Appendix H: Massachusetts MED Channel Frequency

The following channel plan and frequency listing was developed to ensure ambulances operating anywhere within the Commonwealth of Massachusetts have the ability to communicate with the appropriate CMED center. At a minimum, services shall program all CMED MED channels as well as the listed National frequencies into a mobile radio located in the ambulance. It is also recommended that they include the Special Operations MED channels. The following charts contain recommended channel configurations for radio banks with both 16 and 20 channel capacities. The banks are listed alphabetically, but may be arranged by region as service needs dictate.

Note 1	MED 4 shall be used for statewide common hailing channel
Note 2	15 second T.O.T shall be programmed into all mobiles and portables on MED 4
Note 3	Shall be utilized for statewide interoperability and interagency communication.
Note 4	May be utilized for dispatch by special request
Note 5	Each Region may put their home CMED as the first bank followed by the others in alphabetical order
Note 6	Region III MED 42 used for hailing in the former North Shore region; MED 4N used for hailing in the former Merrimack Valley region
Note 7	If the radio's receiver cannot support Receive 'PL' Disable it should be programmed for CSQ (Carrier Squelch) operation
Note 8	These channels are to be used only for incident interoperability, in accordance with Incident Command compliant with the National Incident Command System (NIMS).

Commonwealth of Massachusetts EMS Channel Plan - Utilizing Banks with 16 Channels Each

Reg 5 Bar **Barnstable (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	BAR M 1N	MED 1N	Barnstable CMED MED 1N	463.0000	2A/114.8	468.0000	2A/114.8	
2	BAR M 2N	MED 2N	Barnstable CMED MED 2N	463.0250	2A/114.8	468.0250	2A/114.8	
3	BAR M 3N	MED 3N	Barnstable CMED MED 3N	463.0500	2A/114.8	468.0500	2A/114.8	
4	BAR M 4N	MED 4N	Barnstable CMED MED 4N	463.0750	2A/114.8	468.0750	2A/114.8	* See Note 1 & 2
5	BAR M 5N	MED 5N	Barnstable CMED MED 5N	463.1000	2A/114.8	468.1000	2A/114.8	
6	BAR M 6N	MED 6N	Barnstable CMED MED 6N	463.1250	2A/114.8	468.1250	2A/114.8	
7	BAR M 7N	MED 7N	Barnstable CMED MED 7N	463.1500	2A/114.8	468.1500	2A/114.8	
8	BAR M 8N	MED 8N	Barnstable CMED MED 8N	463.1750	2A/114.8	468.1750	2A/114.8	
9	BAR M 12	MED 12	Barnstable CMED MED 12	463.0125	2A/114.8	468.0125	2A/114.8	
10	BAR M 22	MED 22	Barnstable CMED MED 22	463.0375	2A/114.8	468.0375	2A/114.8	
11	BAR M 32	MED 32	Barnstable CMED MED 32	463.0625	2A/114.8	468.0625	2A/114.8	
12	BAR M 42	MED 42	Barnstable CMED MED 42	463.0875	2A/114.8	468.0875	2A/114.8	
13	BAR M 52	MED 52	Barnstable CMED MED 52	463.1125	2A/114.8	468.1125	2A/114.8	
14	BAR M 62	MED 62	Barnstable CMED MED 62	463.1375	2A/114.8	468.1375	2A/114.8	
15	BAR M 72	MED 72	Barnstable CMED MED 72	463.1625	2A/114.8	468.1625	2A/114.8	
16	BAR M 82	MED 82	Barnstable CMED MED 82	463.1875	2A/114.8	468.1875	2A/114.8	

Reg 4 Bos **Boston (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	BOS M 1N	MED 1N	Metro Boston CMED MED 1N	463.0000	4Z/136.5	468.0000	4Z/136.5	
2	BOS M 2N	MED 2N	Metro Boston CMED MED 2N	463.0250	4Z/136.5	468.0250	4Z/136.5	
3	BOS M 3N	MED 3N	Metro Boston CMED MED 3N	463.0500	4Z/136.5	468.0500	4Z/136.5	
4	BOS M 4N	MED 4N	Metro Boston CMED MED 4N	463.0750	4Z/136.5	468.0750	4Z/136.5	* See Note 1 & 2
5	BOS M 5N	MED 5N	Metro Boston CMED MED 5N	463.1000	4Z/136.5	468.1000	4Z/136.5	
6	BOS M 6N	MED 6N	Metro Boston CMED MED 6N	463.1250	4Z/136.5	468.1250	4Z/136.5	
7	BOS M 7N	MED 7N	Metro Boston CMED MED 7N	463.1500	4Z/136.5	468.1500	4Z/136.5	
8	BOS M 8N	MED 8N	Metro Boston CMED MED 8N	463.1750	4Z/136.5	468.1750	4Z/136.5	
9	BOS M 12	MED 12	Metro Boston CMED MED 12	463.0125	4Z/136.5	468.0125	4Z/136.5	
10	BOS M 22	MED 22	Metro Boston CMED MED 22	463.0375	4Z/136.5	468.0375	4Z/136.5	
11	BOS M 32	MED 32	Metro Boston CMED MED 32	463.0625	4Z/136.5	468.0625	4Z/136.5	
12	BOS M 42	MED 42	Metro Boston CMED MED 42	463.0875	4Z/136.5	468.0875	4Z/136.5	
13	BOS M 52	MED 52	Metro Boston CMED MED 52	463.1125	4Z/136.5	468.1125	4Z/136.5	
14	BOS M 62	MED 62	Metro Boston CMED MED 62	463.1375	4Z/136.5	468.1375	4Z/136.5	
15	BOS M 72	MED 72	Metro Boston CMED MED 72	463.1625	4Z/136.5	468.1625	4Z/136.5	
16	BOS M 82	MED 82	Metro Boston CMED MED 82	463.1875	4Z/136.5	468.1875	4Z/136.5	

Reg 5 Bri **Bristol (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	BRI M 1N	MED 1N	Bristol CMED MED 1N	463.0000	3A/127.3	468.0000	3A/127.3	
2	BRI M 2N	MED 2N	Bristol CMED MED 2N	463.0250	3A/127.3	468.0250	3A/127.3	
3	BRI M 3N	MED 3N	Bristol CMED MED 3N	463.0500	3A/127.3	468.0500	3A/127.3	
4	BRI M 4N	MED 4N	Bristol CMED MED 4N	463.0750	3A/127.3	468.0750	3A/127.3	*See Note 1 & 2
5	BRI M 5N	MED 5N	Bristol CMED MED 5N	463.1000	3A/127.3	468.1000	3A/127.3	
6	BRI M 6N	MED 6N	Bristol CMED MED 6N	463.1250	3A/127.3	468.1250	3A/127.3	
7	BRI M 7N	MED 7N	Bristol CMED MED 7N	463.1500	3A/127.3	468.1500	3A/127.3	
8	BRI M 8N	MED 8N	Bristol CMED MED 8N	463.1750	3A/127.3	468.1750	3A/127.3	
9	BRI M 12	MED 12	Bristol CMED MED 12	463.0125	3A/127.3	468.0125	3A/127.3	
10	BRI M 22	MED 22	Bristol CMED MED 22	463.0375	3A/127.3	468.0375	3A/127.3	
11	BRI M 32	MED 32	Bristol CMED MED 32	463.0625	3A/127.3	468.0625	3A/127.3	
12	BRI M 42	MED 42	Bristol CMED MED 42	463.0875	3A/127.3	468.0875	3A/127.3	
13	BRI M 52	MED 52	Bristol CMED MED 52	463.1125	3A/127.3	468.1125	3A/127.3	
14	BRI M 62	MED 62	Bristol CMED MED 62	463.1375	3A/127.3	468.1375	3A/127.3	
15	BRI M 72	MED 72	Bristol CMED MED 72	463.1625	3A/127.3	468.1625	3A/127.3	
16	BRI M 82	MED 82	Bristol CMED MED 82	463.1875	3A/127.3	468.1875	3A/127.3	

Reg 3 NE **Northeast (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	N E M 1N	MED 1N	Northeast CMED MED 1N	463.0000	3Z/123.0	468.0000	3Z/123.0	
2	N E M 2N	MED 2N	Northeast CMED MED 2N	463.0250	3Z/123.0	468.0250	3Z/123.0	
3	N E M 3N	MED 3N	Northeast CMED MED 3N	463.0500	3Z/123.0	468.0500	3Z/123.0	
4	N E M 4N	MED 4N	Northeast CMED MED 4N	463.0750	3Z/123.0	468.0750	3Z/123.0	*See Note 1 & 2
5	N E M 5N	MED 5N	Northeast CMED MED 5N	463.1000	3Z/123.0	468.1000	3Z/123.0	
6	N E M 6N	MED 6N	Northeast CMED MED 6N	463.1250	3Z/123.0	468.1250	3Z/123.0	
7	N E M 7N	MED 7N	Northeast CMED MED 7N	463.1500	3Z/123.0	468.1500	3Z/123.0	
8	N E M 8N	MED 8N	Northeast CMED MED 8N	463.1750	3Z/123.0	468.1750	3Z/123.0	
9	N E M 12	MED 12	Northeast CMED MED 12	463.0125	3Z/123.0	468.0125	3Z/123.0	
10	N E M 22	MED 22	Northeast CMED MED 22	463.0375	3Z/123.0	468.0375	3Z/123.0	
11	N E M 32	MED 32	Northeast CMED MED 32	463.0625	3Z/123.0	468.0625	3Z/123.0	
12	N E M 42	MED 42	Northeast CMED MED 42	463.0875	3Z/123.0	468.0875	3Z/123.0	* See Note 5
13	N E M 52	MED 52	Northeast CMED MED 52	463.1125	3Z/123.0	468.1125	3Z/123.0	
14	N E M 62	MED 62	Northeast CMED MED 62	463.1375	3Z/123.0	468.1375	3Z/123.0	
15	N E M 72	MED 72	Northeast CMED MED 72	463.1625	3Z/123.0	468.1625	3Z/123.0	
16	N E M 82	MED 82	Northeast CMED MED 82	463.1875	3Z/123.0	468.1875	3Z/123.0	

Reg 5 Ply **Plymouth (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	PLY M 1N	MED 1N	Plymouth CMED MED 1N	463.0000	1A/103.5	468.0000	1A/103.5	
2	PLY M 2N	MED 2N	Plymouth CMED MED 2N	463.0250	1A/103.5	468.0250	1A/103.5	
3	PLY M 3N	MED 3N	Plymouth CMED MED 3N	463.0500	1A/103.5	468.0500	1A/103.5	
4	PLY M 4N	MED 4N	Plymouth CMED MED 4N	463.0750	1A/103.5	468.0750	1A/103.5	* See Note 1 & 2
5	PLY M 5N	MED 5N	Plymouth CMED MED 5N	463.1000	1A/103.5	468.1000	1A/103.5	
6	PLY M 6N	MED 6N	Plymouth CMED MED 6N	463.1250	1A/103.5	468.1250	1A/103.5	
7	PLY M 7N	MED 7N	Plymouth CMED MED 7N	463.1500	1A/103.5	468.1500	1A/103.5	
8	PLY M 8N	MED 8N	Plymouth CMED MED 8N	463.1750	1A/103.5	468.1750	1A/103.5	
9	PLY M 12	MED 12	Plymouth CMED MED 12	463.0125	1A/103.5	468.0125	1A/103.5	
10	PLY M 22	MED 22	Plymouth CMED MED 22	463.0375	1A/103.5	468.0375	1A/103.5	
11	PLY M 32	MED 32	Plymouth CMED MED 32	463.0625	1A/103.5	468.0625	1A/103.5	
12	PLY M 42	MED 42	Plymouth CMED MED 42	463.0875	1A/103.5	468.0875	1A/103.5	
13	PLY M 52	MED 52	Plymouth CMED MED 52	463.1125	1A/103.5	468.1125	1A/103.5	
14	PLY M 62	MED 62	Plymouth CMED MED 62	463.1375	1A/103.5	468.1375	1A/103.5	
15	PLY M 72	MED 72	Plymouth CMED MED 72	463.1625	1A/103.5	468.1625	1A/103.5	
16	PLY M 82	MED 82	Plymouth CMED MED 82	463.1875	1A/103.5	468.1875	1A/103.5	

Reg 1 Sprfld **Springfield (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	SPR M 1N	MED1N	Springfield CMED MED 1N	463.0000	1Z/100.0	468.000	1Z/100.0	
2	SPR M 2N	MED 2N	Springfield CMED MED 2N	463.0250	1Z/100.0	468.025	1Z/100.0	
3	SPR M 3N	MED 3N	Springfield CMED MED 3N	463.0500	1Z/100.0	468.050	1Z/100.0	
4	SPR M 4N	MED 4N	Springfield CMED MED 4N	463.0750	1Z/100.0	468.075	1Z/100.0	* See Note 1 & 2
5	SPR M 5N	MED 5N	Springfield CMED MED 5N	463.1000	1Z/100.0	468.100	1Z/100.0	
6	SPR M 6N	MED 6N	Springfield CMED MED 6N	463.1250	1Z/100.0	468.125	1Z/100.0	
7	SPR M 7N	MED 7N	Springfield CMED MED 7N	463.1500	1Z/100.0	468.150	1Z/100.0	
8	SPR M 8N	MED 8N	Springfield CMED MED 8N	463.1750	1Z/100.0	468.175	1Z/100.0	
9	SPR M 12	MED 12	Springfield CMED MED 12	463.0125	1Z/100.0	468.0125	1Z/100.0	
10	SPR M 22	MED22	Springfield CMED MED 22	463.0375	1Z/100.0	468.0375	1Z/100.0	
11	SPR M 32	MED 32	Springfield CMED MED 32	463.0625	1Z/100.0	468.0625	1Z/100.0	
12	SPR M 42	MED 42	Springfield CMED MED 42	463.0875	1Z/100.0	468.0875	1Z/100.0	
13	SPR M 52	MED 52	Springfield CMED MED 52	463.1125	1Z/100.0	468.1125	1Z/100.0	
14	SPR M 62	MED 62	Springfield CMED MED 62	463.1375	1Z/100.0	468.1375	1Z/100.0	
15	SPR M 72	MED 72	Springfield CMED MED 72	463.1625	1Z/100.0	468.1625	1Z/100.0	
16	SPR M 82	MED 82	Springfield CMED MED 82	463.1875	1Z/100.0	468.1875	1Z/100.0	

Reg 2 Worc **Worcester (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	WOR M 1N	MED 1N	Worcester CMED MED 1N	463.0000	2Z/110.9	468.0000	2Z/110.9	
2	WOR M 2N	MED 2N	Worcester CMED MED 2N	463.0250	2Z/110.9	468.0250	2Z/110.9	
3	WOR M 3N	MED 3N	Worcester CMED MED 3N	463.0500	2Z/110.9	468.0500	2Z/110.9	
4	WOR M 4N	MED 4N	Worcester CMED MED 4N	463.0750	2Z/110.9	468.0750	2Z/110.9	* See Note 1 & 2
5	WOR M 5N	MED 5N	Worcester CMED MED 5N	463.1000	2Z/110.9	468.1000	2Z/110.9	
6	WOR M 6N	MED 6N	Worcester CMED MED 6N	463.1250	2Z/110.9	468.1250	2Z/110.9	
7	WOR M 7N	MED 7N	Worcester CMED MED 7N	463.1500	2Z/110.9	468.1500	2Z/110.9	
8	WOR M 8N	MED 8N	Worcester CMED MED 8N	463.1750	2Z/110.9	468.1750	2Z/110.9	
9	WOR M 12	MED 12	Worcester CMED MED 12	463.0125	2Z/110.9	468.0125	2Z/110.9	
10	WOR M 22	MED 22	Worcester CMED MED 22	463.0375	2Z/110.9	468.0375	2Z/110.9	
11	WOR M 32	MED 32	Worcester CMED MED 32	463.0625	2Z/110.9	468.0625	2Z/110.9	
12	WOR M 42	MED 42	Worcester CMED MED 42	463.0875	2Z/110.9	468.0875	2Z/110.9	
13	WOR M 52	MED 52	Worcester CMED MED 52	463.1125	2Z/110.9	468.1125	2Z/110.9	
14	WOR M 62	MED 62	Worcester CMED MED 62	463.1375	2Z/110.9	468.1375	2Z/110.9	
15	WOR M 72	MED 72	Worcester CMED MED 72	463.1625	2Z/110.9	468.1625	2Z/110.9	
16	WOR M 82	MED 82	Worcester CMED MED 82	463.1875	2Z/110.9	468.1875	2Z/110.9	

I OP **Interop (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	BAR M 9N	MED 9N	Barnstable CMED MED 9N	462.9500	2A/114.8	467.9500	2A/114.8	*See Note 3 & 4
2	BAR M10N	MED 10N	Barnstable CMED MED 10N	462.9750	2A/114.8	467.9750	2A/114.8	*See Note 3 & 4
3	BAR M 92	MED 92	Barnstable CMED MED 92-Direct	462.9625	2A/114.8	462.9625	2A/114.8	*See Note 3
4	BAR M102	MED 102	Barnstable CMED MED 102	462.9875	2A/114.8	467.9875	2A/114.8	*See Note 3
5	BOS M 9N	MED 9N	Metro Boston CMED MED 9N	462.9500	4Z/136.5	467.9500	4Z/136.5	*See Note 3 & 4
6	BOS M10N	MED 10N	Metro Boston CMED MED 10N	462.9750	4Z/136.5	467.9750	4Z/136.5	*See Note 3 & 4
7	BOS M 92	MED 92	Metro Boston CMED MED 92-Direct	462.9625	4Z/136.5	462.9625	4Z/136.5	*See Note 3
8	BOS M102	MED 102	Metro Boston CMED MED 102	462.9875	4Z/136.5	467.9875	4Z/136.5	*See Note 3
9	BRI M 9N	MED 9N	Bristol CMED MED 9N	462.9500	3A/127.3	467.9500	3A/127.3	*See Note 3 & 4
10	BRI M10N	MED 10N	Bristol CMED MED 10N	462.9750	3A/127.3	467.9750	3A/127.3	*See Note 3 & 4
11	BRI M 92	MED 92	Bristol CMED MED 92-Direct	462.9625	3A/127.3	462.9625	3A/127.3	*See Note 3
12	BRI M102	MED 102	Bristol CMED MED 102	462.9875	3A/127.3	467.9875	3A/127.3	*See Note 3
13	N E M 9N	MED 9N	Northeast CMED MED 9N	462.9500	3Z/123.0	467.9500	3Z/123.0	*See Note 3 & 4
14	N E M10N	MED 10N	Northeast CMED MED 10N	462.9750	3Z/123.0	467.9750	3Z/123.0	*See Note 3 & 4
15	N E M 92	MED 92	Northeast CMED MED 92-Direct	462.9625	3Z/123.0	462.9625	3Z/123.0	*See Note 3
16	N E M102	MED 102	Northeast CMED MED 102	462.9875	3Z/123.0	467.9875	3Z/123.0	*See Note 3

I OP **Interop (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	PLY M 9N	MED 9N	Plymouth CMED MED 9N	462.9500	1A/103.5	467.9500	1A/103.5	*See Note 3 & 4
2	PLY M10N	MED 10N	Plymouth CMED MED 10N	462.9750	1A/103.5	467.9750	1A/103.5	*See Note 3 & 4
3	PLY M 92	MED 92	Plymouth CMED MED 92-Direct	462.9625	1A/103.5	462.9625	1A/103.5	*See Note 3
4	PLY M102	MED 102	Plymouth CMED MED 102	462.9875	1A/103.5	467.9875	1A/103.5	*See Note 3
5	SPR M 9N	MED 9N	Springfield CMED MED 9N	462.9500	1Z/100.0	467.950	1Z/100.0	*See Note 3 & 4
6	SPR M10N	MED10N	Springfield CMED MED 10N	462.9750	1Z/100.0	467.975	1Z/100.0	*See Note 3 & 4
7	SPR M 92	MED 92	Springfield CMED MED 92-Direct	462.9625	1Z/100.0	462.9625	1Z/100.0	*See Note 3
8	SPR M102	MED 102	Springfield CMED MED 102	462.9875	1Z/100.0	467.9875	1Z/100.0	*See Note 3
9	WOR M 9N	MED 9N	Worcester CMED MED 9N	462.9500	2Z/110.9	467.9500	2Z/110.9	*See Note 3 & 4
10	WOR M10N	MED 10N	Worcester CMED MED 10N	462.9750	2Z/110.9	467.9750	2Z/110.9	*See Note 3 & 4
11	WOR M 92	MED 92	Worcester CMED MED 92-Direct	462.9625	2Z/110.9	462.9625	2Z/110.9	*See Note 3
12	WOR M102	MED 102	Worcester CMED MED 102	462.9875	2Z/110.9	467.9875	2Z/110.9	*See Note 3
13	SOP M9	SOP MED 9	Special Operation MED 9	462.9500	YB/88.5	467.9500	YB/88.5	* See Note 7 & 8
14	SOP M10	SOP MED 10	Special Operation MED 10	462.9750	YB/88.5	467.9750	YB/88.5	* See Note 7 & 8
15	SOP M92	SOP MED 92	Special Operation MED 92-Direct	462.9625	YB/88.5	462.9625	YB/88.5	* See Note 7 & 8
16	SOP M102	SOP MED 102	Special Operation MED 102	462.9875	YB/88.5	467.9875	YB/88.5	* See Note 7 & 8

Nat **National (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	UCALL 40	UCALL 40	UHF National Interop Channel 40	453.2125	5A/156.7	458.2125	5A/156.7	* See Note 7 & 8
2	UCALL40D	UCALL 40-D	UHF Nat. Interop Channel 40 Direct	453.2125	5A/156.7	453.2125	5A/156.7	* See Note 7 & 8
3	UTAC 41	UTAC 41	UHF National Interop Tactical 41	453.4625	5A/156.7	458.4625	5A/156.7	* See Note 7 & 8
4	UTAC 41D	UTAC 41-D	UHF Nat. Interop Tactical 41 Direct	453.4625	5A/156.7	453.4625	5A/156.7	* See Note 7 & 8
5	UTAC 42	UTAC 42	UHF National Interop Tactical 42	453.7125	5A/156.7	458.7125	5A/156.7	* See Note 7 & 8
6	UTAC 42D	UTAC 42-D	UHF Nat. Interop Tactical 42 Direct	453.7125	5A/156.7	453.7125	5A/156.7	* See Note 7 & 8
7	UTAC 43	UTAC 43	UHF National Interop Tactical 43	453.8625	5A/156.7	458.8625	5A/156.7	* See Note 7 & 8
8	UTAC 43D	UTAC 43-D	UHF Nat. Interop Tactical 43 Direct	453.8625	5A/156.7	453.8625	5A/156.7	* See Note 7 & 8
9								
10								
11								
12								
13								
14								
15								
16								

Commonwealth of Massachusetts EMS Channel Plan - Utilizing Banks with 20 Channels

Reg 5 Bar **Barnstable (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	BAR M 1N	MED 1N	Barnstable CMED MED 1N	463.0000	2A/114.8	468.0000	2A/114.8	
2	BAR M 2N	MED 2N	Barnstable CMED MED 2N	463.0250	2A/114.8	468.0250	2A/114.8	
3	BAR M 3N	MED 3N	Barnstable CMED MED 3N	463.0500	2A/114.8	468.0500	2A/114.8	
4	BAR M 4N	MED 4N	Barnstable CMED MED 4N	463.0750	2A/114.8	468.0750	2A/114.8	* See Note 1 & 2
5	BAR M 5N	MED 5N	Barnstable CMED MED 5N	463.1000	2A/114.8	468.1000	2A/114.8	
6	BAR M 6N	MED 6N	Barnstable CMED MED 6N	463.1250	2A/114.8	468.1250	2A/114.8	
7	BAR M 7N	MED 7N	Barnstable CMED MED 7N	463.1500	2A/114.8	468.1500	2A/114.8	
8	BAR M 8N	MED 8N	Barnstable CMED MED 8N	463.1750	2A/114.8	468.1750	2A/114.8	
9	BAR M 9N	MED 9N	Barnstable CMED MED 9N	462.9500	2A/114.8	467.9500	2A/114.8	*See Note 3 & 4
10	BAR M10N	MED 10N	Barnstable CMED MED 10N	462.9750	2A/114.8	467.9750	2A/114.8	*See Note 3 & 4
11	BAR M 12	MED 12	Barnstable CMED MED 12	463.0125	2A/114.8	468.0125	2A/114.8	
12	BAR M 22	MED 22	Barnstable CMED MED 22	463.0375	2A/114.8	468.0375	2A/114.8	
13	BAR M 32	MED 32	Barnstable CMED MED 32	463.0625	2A/114.8	468.0625	2A/114.8	
14	BAR M 42	MED 42	Barnstable CMED MED 42	463.0875	2A/114.8	468.0875	2A/114.8	
15	BAR M 52	MED 52	Barnstable CMED MED 52	463.1125	2A/114.8	468.1125	2A/114.8	
16	BAR M 62	MED 62	Barnstable CMED MED 62	463.1375	2A/114.8	468.1375	2A/114.8	
17	BAR M 72	MED 72	Barnstable CMED MED 72	463.1625	2A/114.8	468.1625	2A/114.8	
18	BAR M 82	MED 82	Barnstable CMED MED 82	463.1875	2A/114.8	468.1875	2A/114.8	
19	BAR M 92	MED 92	Barnstable CMED MED 92-Direct	462.9625	2A/114.8	462.9625	2A/114.8	*See Note 3
20	BAR M102	MED 102	Barnstable CMED MED 102	462.9875	2A/114.8	467.9875	2A/114.8	*See Note 3

Reg 4 Bos **Boston (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	BOS M 1N	MED 1N	Metro Boston CMED MED 1N	463.0000	4Z/136.5	468.0000	4Z/136.5	
2	BOS M 2N	MED 2N	Metro Boston CMED MED 2N	463.0250	4Z/136.5	468.0250	4Z/136.5	
3	BOS M 3N	MED 3N	Metro Boston CMED MED 3N	463.0500	4Z/136.5	468.0500	4Z/136.5	
4	BOS M 4N	MED 4N	Metro Boston CMED MED 4N	463.0750	4Z/136.5	468.0750	4Z/136.5	* See Note 1 & 2
5	BOS M 5N	MED 5N	Metro Boston CMED MED 5N	463.1000	4Z/136.5	468.1000	4Z/136.5	
6	BOS M 6N	MED 6N	Metro Boston CMED MED 6N	463.1250	4Z/136.5	468.1250	4Z/136.5	
7	BOS M 7N	MED 7N	Metro Boston CMED MED 7N	463.1500	4Z/136.5	468.1500	4Z/136.5	
8	BOS M 8N	MED 8N	Metro Boston CMED MED 8N	463.1750	4Z/136.5	468.1750	4Z/136.5	
9	BOS M 9N	MED 9N	Metro Boston CMED MED 9N	462.9500	4Z/136.5	467.9500	4Z/136.5	*See Note 3 & 4
10	BOS M10N	MED 10N	Metro Boston CMED MED 10N	462.9750	4Z/136.5	467.9750	4Z/136.5	*See Note 3 & 4
11	BOS M 12	MED 12	Metro Boston CMED MED 12	463.0125	4Z/136.5	468.0125	4Z/136.5	
12	BOS M 22	MED 22	Metro Boston CMED MED 22	463.0375	4Z/136.5	468.0375	4Z/136.5	
13	BOS M 32	MED 32	Metro Boston CMED MED 32	463.0625	4Z/136.5	468.0625	4Z/136.5	
14	BOS M 42	MED 42	Metro Boston CMED MED 42	463.0875	4Z/136.5	468.0875	4Z/136.5	
15	BOS M 52	MED 52	Metro Boston CMED MED 52	463.1125	4Z/136.5	468.1125	4Z/136.5	
16	BOS M 62	MED 62	Metro Boston CMED MED 62	463.1375	4Z/136.5	468.1375	4Z/136.5	
17	BOS M 72	MED 72	Metro Boston CMED MED 72	463.1625	4Z/136.5	468.1625	4Z/136.5	
18	BOS M 82	MED 82	Metro Boston CMED MED 82	463.1875	4Z/136.5	468.1875	4Z/136.5	
19	BOS M 92	MED 92	Metro Boston CMED MED 92-Direct	462.9625	4Z/136.5	462.9625	4Z/136.5	*See Note 3
20	BOS M102	MED 102	Metro Boston CMED MED 102	462.9875	4Z/136.5	467.9875	4Z/136.5	*See Note 3

Reg 5 Bri **Bristol (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	BRI M 1N	MED 1N	Bristol CMED MED 1N	463.0000	3A/127.3	468.0000	3A/127.3	
2	BRI M 2N	MED 2N	Bristol CMED MED 2N	463.0250	3A/127.3	468.0250	3A/127.3	
3	BRI M 3N	MED 3N	Bristol CMED MED 3N	463.0500	3A/127.3	468.0500	3A/127.3	
4	BRI M 4N	MED 4N	Bristol CMED MED 4N	463.0750	3A/127.3	468.0750	3A/127.3	* See Note 1 & 2
5	BRI M 5N	MED 5N	Bristol CMED MED 5N	463.1000	3A/127.3	468.1000	3A/127.3	
6	BRI M 6N	MED 6N	Bristol CMED MED 6N	463.1250	3A/127.3	468.1250	3A/127.3	
7	BRI M 7N	MED 7N	Bristol CMED MED 7N	463.1500	3A/127.3	468.1500	3A/127.3	
8	BRI M 8N	MED 8N	Bristol CMED MED 8N	463.1750	3A/127.3	468.1750	3A/127.3	
9	BRI M 9N	MED 9N	Bristol CMED MED 9N	462.9500	3A/127.3	467.9500	3A/127.3	*See Note 3 & 4
10	BRI M10N	MED10N	Bristol CMED MED 10N	462.9750	3A/127.3	467.9750	3A/127.3	*See Note 3 & 4
11	BRI M 12	MED 12	Bristol CMED MED 12	463.0125	3A/127.3	468.0125	3A/127.3	
12	BRI M 22	MED 22	Bristol CMED MED 22	463.0375	3A/127.3	468.0375	3A/127.3	
13	BRI M 32	MED 32	Bristol CMED MED 32	463.0625	3A/127.3	468.0625	3A/127.3	
14	BRI M 42	MED 42	Bristol CMED MED 42	463.0875	3A/127.3	468.0875	3A/127.3	
15	BRI M 52	MED 52	Bristol CMED MED 52	463.1125	3A/127.3	468.1125	3A/127.3	
16	BRI M 62	MED 62	Bristol CMED MED 62	463.1375	3A/127.3	468.1375	3A/127.3	
17	BRI M 72	MED 72	Bristol CMED MED 72	463.1625	3A/127.3	468.1625	3A/127.3	
18	BRI M 82	MED 82	Bristol CMED MED 82	463.1875	3A/127.3	468.1875	3A/127.3	
19	BRI M 92	MED 92	Bristol CMED MED 92-Direct	462.9625	3A/127.3	462.9625	3A/127.3	*See Note 3
20	BRI M102	MED102	Bristol CMED MED 102	462.9875	3A/127.3	467.9875	3A/127.3	*See Note 3

Reg 3 N E **Northeast (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	N E M 1N	MED 1N	Northeast CMED MED 1N	463.0000	3Z/123.0	468.0000	3Z/123.0	
2	N E M 2N	MED 2N	Northeast CMED MED 2N	463.0250	3Z/123.0	468.0250	3Z/123.0	
3	N E M 3N	MED 3N	Northeast CMED MED 3N	463.0500	3Z/123.0	468.0500	3Z/123.0	
4	N E M 4N	MED 4N	Northeast CMED MED 4N	463.0750	3Z/123.0	468.0750	3Z/123.0	* See Note 1 & 2
5	N E M 5N	MED 5N	Northeast CMED MED 5N	463.1000	3Z/123.0	468.1000	3Z/123.0	
6	N E M 6N	MED 6N	Northeast CMED MED 6N	463.1250	3Z/123.0	468.1250	3Z/123.0	
7	N E M 7N	MED 7N	Northeast CMED MED 7N	463.1500	3Z/123.0	468.1500	3Z/123.0	
8	N E M 8N	MED 8N	Northeast CMED MED 8N	463.1750	3Z/123.0	468.1750	3Z/123.0	
9	N E M 9N	MED 9N	Northeast CMED MED 9N	462.9500	3Z/123.0	467.9500	3Z/123.0	*See Note 3 & 4
10	N E M10N	MED 10N	Northeast CMED MED 10N	462.9750	3Z/123.0	467.9750	3Z/123.0	*See Note 3 & 4
11	N E M 12	MED 12	Northeast CMED MED 12	463.0125	3Z/123.0	468.0125	3Z/123.0	
12	N E M 22	MED 22	Northeast CMED MED 22	463.0375	3Z/123.0	468.0375	3Z/123.0	
13	N E M 32	MED 32	Northeast CMED MED 32	463.0625	3Z/123.0	468.0625	3Z/123.0	
14	N E M 42	MED 42	Northeast CMED MED 42	463.0875	3Z/123.0	468.0875	3Z/123.0	* See Note 5
15	N E M 52	MED 52	Northeast CMED MED 52	463.1125	3Z/123.0	468.1125	3Z/123.0	
16	N E M 62	MED 62	Northeast CMED MED 62	463.1375	3Z/123.0	468.1375	3Z/123.0	
17	N E M 72	MED 72	Northeast CMED MED 72	463.1625	3Z/123.0	468.1625	3Z/123.0	
18	N E M 82	MED 82	Northeast CMED MED 82	463.1875	3Z/123.0	468.1875	3Z/123.0	
19	N E M 92	MED 92	Northeast CMED MED 92-Direct	462.9625	3Z/123.0	462.9625	3Z/123.0	*See Note 3
20	N E M102	MED 102	Northeast CMED MED 102	462.9875	3Z/123.0	467.9875	3Z/123.0	*See Note 3

Reg 5 Ply **Plymouth (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	PLY M 1N	MED 1N	Plymouth CMED MED 1N	463.0000	1A/103.5	468.0000	1A/103.5	
2	PLY M 2N	MED 2N	Plymouth CMED MED 2N	463.0250	1A/103.5	468.0250	1A/103.5	
3	PLY M 3N	MED 3N	Plymouth CMED MED 3N	463.0500	1A/103.5	468.0500	1A/103.5	
4	PLY M 4N	MED 4N	Plymouth CMED MED 4N	463.0750	1A/103.5	468.0750	1A/103.5	* See Note 1 & 2
5	PLY M 5N	MED 5N	Plymouth CMED MED 5N	463.1000	1A/103.5	468.1000	1A/103.5	
6	PLY M 6N	MED 6N	Plymouth CMED MED 6N	463.1250	1A/103.5	468.1250	1A/103.5	
7	PLY M 7N	MED 7N	Plymouth CMED MED 7N	463.1500	1A/103.5	468.1500	1A/103.5	
8	PLY M 8N	MED 8N	Plymouth CMED MED 8N	463.1750	1A/103.5	468.1750	1A/103.5	
9	PLY M 9N	MED 9N	Plymouth CMED MED 9N	462.9500	1A/103.5	467.9500	1A/103.5	*See Note 3 & 4
10	PLY M10N	MED 10N	Plymouth CMED MED 10N	462.9750	1A/103.5	467.9750	1A/103.5	*See Note 3 & 4
11	PLY M 12	MED 12	Plymouth CMED MED 12	463.0125	1A/103.5	468.0125	1A/103.5	
12	PLY M 22	MED 22	Plymouth CMED MED 22	463.0375	1A/103.5	468.0375	1A/103.5	
13	PLY M 32	MED 32	Plymouth CMED MED 32	463.0625	1A/103.5	468.0625	1A/103.5	
14	PLY M 42	MED 42	Plymouth CMED MED 42	463.0875	1A/103.5	468.0875	1A/103.5	
15	PLY M 52	MED 52	Plymouth CMED MED 52	463.1125	1A/103.5	468.1125	1A/103.5	
16	PLY M 62	MED 62	Plymouth CMED MED 62	463.1375	1A/103.5	468.1375	1A/103.5	
17	PLY M 72	MED 72	Plymouth CMED MED 72	463.1625	1A/103.5	468.1625	1A/103.5	
18	PLY M 82	MED 82	Plymouth CMED MED 82	463.1875	1A/103.5	468.1875	1A/103.5	
19	PLY M 92	MED 92	Plymouth CMED MED 92-Direct	462.9625	1A/103.5	462.9625	1A/103.5	*See Note 3
20	PLY M102	MED 102	Plymouth CMED MED 102	462.9875	1A/103.5	467.9875	1A/103.5	*See Note 3

Reg 1 Sprfld **Springfield (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	SPR M 1N	MED 1N	Springfield CMED MED 1N	463.0000	1Z/100.0	468.000	1Z/100.0	
2	SPR M 2N	MED 2N	Springfield CMED MED 2N	463.0250	1Z/100.0	468.025	1Z/100.0	
3	SPR M 3N	MED 3N	Springfield CMED MED 3N	463.0500	1Z/100.0	468.050	1Z/100.0	
4	SPR M 4N	MED 4N	Springfield CMED MED 4N	463.0750	1Z/100.0	468.075	1Z/100.0	* See Note 1 & 2
5	SPR M 5N	MED 5N	Springfield CMED MED 5N	463.1000	1Z/100.0	468.100	1Z/100.0	
6	SPR M 6N	MED 6N	Springfield CMED MED 6N	463.1250	1Z/100.0	468.125	1Z/100.0	
7	SPR M 7N	MED 7N	Springfield CMED MED 7N	463.1500	1Z/100.0	468.150	1Z/100.0	
8	SPR M 8N	MED 8N	Springfield CMED MED 8N	463.1750	1Z/100.0	468.175	1Z/100.0	
9	SPR M 9N	MED 9N	Springfield CMED MED 9N	462.9500	1Z/100.0	467.950	1Z/100.0	*See Note 3 & 4
10	SPR M10N	MED 10N	Springfield CMED MED 10N	462.9750	1Z/100.0	467.975	1Z/100.0	*See Note 3 & 4
11	SPR M 12	MED 12	Springfield CMED MED 12	463.0125	1Z/100.0	468.0125	1Z/100.0	
12	SPR M 22	MED 22	Springfield CMED MED 22	463.0375	1Z/100.0	468.0375	1Z/100.0	
13	SPR M 32	MED 32	Springfield CMED MED 32	463.0625	1Z/100.0	468.0625	1Z/100.0	
14	SPR M 42	MED 42	Springfield CMED MED 42	463.0875	1Z/100.0	468.0875	1Z/100.0	
15	SPR M 52	MED 52	Springfield CMED MED 52	463.1125	1Z/100.0	468.1125	1Z/100.0	
16	SPR M 62	MED 62	Springfield CMED MED 62	463.1375	1Z/100.0	468.1375	1Z/100.0	
17	SPR M 72	MED 72	Springfield CMED MED 72	463.1625	1Z/100.0	468.1625	1Z/100.0	
18	SPR M 82	MED 82	Springfield CMED MED 82	463.1875	1Z/100.0	468.1875	1Z/100.0	
19	SPR M 92	MED 92	Springfield CMED MED 92-Direct	462.9625	1Z/100.0	462.9625	1Z/100.0	*See Note 3
20	SPR M102	MED 102	Springfield CMED MED 102	462.9875	1Z/100.0	467.9875	1Z/100.0	*See Note 3

Reg 2 Worc **Worcester (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	WOR M 1N	MED 1N	Worcester CMED MED 1N	463.0000	2Z/110.9	468.0000	2Z/110.9	
2	WOR M 2N	MED 2N	Worcester CMED MED 2N	463.0250	2Z/110.9	468.0250	2Z/110.9	
3	WOR M 3N	MED 3N	Worcester CMED MED 3N	463.0500	2Z/110.9	468.0500	2Z/110.9	
4	WOR M 4N	MED 4N	Worcester CMED MED 4N	463.0750	2Z/110.9	468.0750	2Z/110.9	* See Note 1 & 2
5	WOR M 5N	MED 5N	Worcester CMED MED 5N	463.1000	2Z/110.9	468.1000	2Z/110.9	
6	WOR M 6N	MED 6N	Worcester CMED MED 6N	463.1250	2Z/110.9	468.1250	2Z/110.9	
7	WOR M 7N	MED 7N	Worcester CMED MED 7N	463.1500	2Z/110.9	468.1500	2Z/110.9	
8	WOR M 8N	MED 8N	Worcester CMED MED 8N	463.1750	2Z/110.9	468.1750	2Z/110.9	
9	WOR M 9N	MED 9N	Worcester CMED MED 9N	462.9500	2Z/110.9	467.9500	2Z/110.9	*See Note 3 & 4
10	WOR M10N	MED 10N	Worcester CMED MED 10N	462.9750	2Z/110.9	467.9750	2Z/110.9	*See Note 3 & 4
11	WOR M 12	MED 12	Worcester CMED MED 12	463.0125	2Z/110.9	468.0125	2Z/110.9	
12	WOR M 22	MED 22	Worcester CMED MED 22	463.0375	2Z/110.9	468.0375	2Z/110.9	
13	WOR M 32	MED 32	Worcester CMED MED 32	463.0625	2Z/110.9	468.0625	2Z/110.9	
14	WOR M 42	MED 42	Worcester CMED MED 42	463.0875	2Z/110.9	468.0875	2Z/110.9	
15	WOR M 52	MED 52	Worcester CMED MED 52	463.1125	2Z/110.9	468.1125	2Z/110.9	
16	WOR M 62	MED 62	Worcester CMED MED 62	463.1375	2Z/110.9	468.1375	2Z/110.9	
17	WOR M 72	MED 72	Worcester CMED MED 72	463.1625	2Z/110.9	468.1625	2Z/110.9	
18	WOR M 82	MED 82	Worcester CMED MED 82	463.1875	2Z/110.9	468.1875	2Z/110.9	
19	WOR M 92	MED 92	Worcester CMED MED 92-Direct	462.9625	2Z/110.9	462.9625	2Z/110.9	*See Note 3
20	WOR M102	MED 102	Worcester CMED MED 102	462.9875	2Z/110.9	467.9875	2Z/110.9	*See Note 3

Nat **Interop-Nat (+)**

Chan.	8 Character Display	14-Character Mobile Display	Channel Name	Receive Frequency	Receive PL/DPL	Transmit Frequency	Transmit PL/DPL	Special Info
1	UCALL 40	UCALL 40	UHF National Interop Channel 40	453.2125	5A/156.7	458.2125	5A/156.7	* See Note 7 & 8 & 8
2	UCALL40D	UCALL 40-D	UHF Nat. Interop Channel 40 Direct	453.2125	5A/156.7	453.2125	5A/156.7	* See Note 7 & 8
3	UTAC 41	UTAC 41	UHF National Interop Tactical 41	453.4625	5A/156.7	458.4625	5A/156.7	* See Note 7 & 8
4	UTAC 41D	UTAC 41-D	UHF Nat. Interop Tactical 41 Direct	453.4625	5A/156.7	453.4625	5A/156.7	* See Note 7 & 8
5	UTAC 42	UTAC 42	UHF National Interop Tactical 42	453.7125	5A/156.7	458.7125	5A/156.7	* See Note 7 & 8
6	UTAC 42D	UTAC 42-D	UHF Nat. Interop Tactical 42 Direct	453.7125	5A/156.7	453.7125	5A/156.7	* See Note 7 & 8
7	UTAC 43	UTAC 43	UHF National Interop Tactical 43	453.8625	5A/156.7	458.8625	5A/156.7	* See Note 7 & 8
8	UTAC 43D	UTAC 43-D	UHF Nat. Interop Tactical 43 Direct	453.8625	5A/156.7	453.8625	5A/156.7	* See Note 7 & 8
9	SOP M9	SOP M9	Special Operation MED 9	462.9500	YB/88.5	467.9500	YB/88.5	* See Note 7 & 8
10	SOP M10	SOP M10	Special Operation MED 10	462.9750	YB/88.5	467.9750	YB/88.5	* See Note 7 & 8
11	SOP M92	SOP M92	Special Operation MED 92-Direct	462.9625	YB/88.5	462.9625	YB/88.5	* See Note 7 & 8
12	SOP M102	SOP M102	Special Operation MED 102	462.9875	YB/88.5	467.9875	YB/88.5	* See Note 7 & 8
13								
14								
15								
16								
17								
18								
19								
20								

8.8 Appendix I: Trailer Contact

RMCSU Trailer-Contacts	Street	City	State	Zip	Phone Number
EMS Region 1 - Western CMED	595 Cottage Street	Springfield	MA	01109	413-846-6226
EMS Region 1 – Berkshire County	467 Cheshire Road	Pittsfield	MA	01201	413-442-0512
EMS Region 1 – Northampton Control	555 North King Street	Northampton	MA	01060	413-586-1508
EMS Region 2 - CMED	361 Holden Street	Holden	MA	01520	508-854-0100
EMS Region 3 - CMED	One General Street	Lawrence	MA	01842	978-946-8130
EMS Region 4 - CMED	1199 Tremont Street	Boston	MA	02118	617-343-1499
EMS Region 5 - Barnstable CMED	3132 Richardon Road	Otis ANGB	MA	02542	(508) 362-4335
EMS Region 5 - Bristol CMED	82 E. Main Street	Norton	MA		(508) 285-5380
EMS Region 5 - Plymouth CMED	24 Long Pond Road	Plymouth	MA	02360	(508) 747-1779

8.9