



NORTHEAST HOMELAND SECURITY REGIONAL ADVISORY COUNCIL

Interoperability Committee Meeting

Agenda

January 10, 2023

9:30am

*North Shore Regional 911 Center
18 Manning Avenue, Middleton, MA 01949*

Remote Participation Option:

[Zoom Link](#)

Meeting ID: 854 0489 1996

Passcode: 141274

Dial In: 646 876 9923

- Call to Order (9:30am)
- MEMA GIS Presentation/Discussion (9:30am – 10:00am)
- Approval of Minutes (10:00am – 10:05am)
 - November 8, 2022 Meeting Minutes
 - December 13, 2022 Meeting Minutes
- Budget Updates (10:05am – 10:10am)
- Project Updates (10:10am – 10:20am)
 - ECFCA UHF Receivers
 - ECCOPA Radio Cache
 - Fire District 5 and 15 Portable Radio Cache
 - Fire District 5 and 15 Wide Area VHF
 - Fire District 5 and 15 Mobile Gateway Radios and Recorders
 - Fire District 6 Communications Upgrades
 - Fire District 6 MW Groton to Westford
 - Littleton All-Band Console Upgrade
 - Metrofire North District Feasibility Study
 - GBPC Microwave Routers and Switches
 - NERAC Radio Programming Initiative
- Fire District 14 Equipment Disposal (10:20am – 10:25am)
 - Motorola 7500 Consoles Transfer
 - Radio Consoles, Microphones, and Monitor Disposal
- New Business Unforeseen by the Chair (10:25am – 10:30am)

*** Next Meeting: February 14, 2023 ***



NORTHEAST HOMELAND SECURITY REGIONAL ADVISORY COUNCIL

Interoperability Committee Meeting

Minutes – DRAFT

November 8, 2022

9:30am

*North Shore Regional 911 Center
18 Manning Avenue, Middleton, MA 01949*

Call to Order

- Chair C. Ryan called the meeting order at 9:31am.
- The Committee did not yet have quorum.

Approval of Minutes

- Approval of the September 13 and October 11, 2022 minutes was postponed because the Committee did not yet have a quorum.

Budget Updates

- FFY19 Deadline: December 31, 2022
 - \$58,017.02 in Interop funds to spend down.
 - \$56,505.70 is encumbered in A.14 ECFA UHF Receivers and awaiting delivery.
 - \$1,511.32 unallocated is intended for the remaining ECFA equipment.
 - MAPC is reviewing current invoices and expected deliveries to determine the best transfers to close out FFY19.
 - The NERAC Full Council may allow MAPC authority to make necessary transfers across Committees and grant years, ensuring that any exchanges are even swaps.
- FFY20 Deadline: June 30, 2023
- FFY21 Deadline: July 31, 2023
- FFY22 Funding: MAPC has received the contracts and developing the budget spreadsheets and other preparation for that grant cycle.

The Committee reached quorum.

MOTION put forth by Chief R. Patterson.

- Approve the September 13 and October 11, 2022 Meeting Minutes.
- Seconded by J. Griffin.
 - In Favor: All.
 - Opposed: None.
 - Abstain: None.
- The motion passed.

Project Updates

- *ECFCA UHF Receivers*
 - Tessco equipment has been delivered.
 - Motorola equipment is delayed.
 - We will need specifications for remaining items in order to conduct the final procurement for that project.
- *ECCOPA Radio Cache*
 - The radios and mics were received.
 - The chargers and spare batteries are delayed.
 - The invoices received didn't align with the quotes, so Motorola is working on revised invoices before they can be paid.
- *Fire District 5 and 15 Portable Radio Cache*
 - The multi-unit chargers were scheduled to ship at the end of October but have not arrived yet.
 - The procurement for the harnesses and backpacks was conducted, and the PO is awaiting signatures.
- *Fire District 6 Communications Upgrades*
 - The antenna and microwave links installation for this project have begun.
- *Littleton All-Band Console Upgrades*
 - Due to the equipment lead times, the vendor estimates April to May 2023 completion.
 - MAPC will look into whether some work can be done earlier.
- *Metrofire North District Feasibility Study*
 - This procurement was conducted, and two quotes were received.
 - The low quote was CDWG and the PO is being signed.
- *Microwave Routers and Switches*
 - A first round RFQ was conducted and set up to award all items to a single vendor, but we did not receive a quote for all items and could not make an award.
 - The RFQ has been reissued in a way that lets us contract for individual items if needed.
- *NERAC Radio Programming Initiative*
 - Drafts of the MOU, policies and procedures, and programming support request form were included in last month's meeting packet.
 - MAPC is working with their legal team to complete the documents, and we expect final versions for Committee approval at the December meeting.
 - The Committee determined that both Overtime and Backfill reimbursement options should be allowed.

Fire District 14 Equipment Disposal

- *Motorola 7500 Consoles Transfer*
 - Final drafts of the MOU are with legal for approval.
- *Radio Consoles, Microphones, and Monitor Disposal*
 - The Full Council voted at their last meeting to request EOPSS approval to dispose, so we are working on the necessary documents.

MEMA GIS Presentation

- MEMA will be presenting on GIS at the December Interop meeting.

- The committee plans to discuss available resources, future plans, and collaboration with MEMA.

Cybersecurity in Interoperability and Information Sharing

- The Committee discussed the benefits of having Cybersecurity representative participation at meetings.
- It would be beneficial to have a conversation to between public safety entities and Cyber/IT leadership to discuss needs.

MOTION put forth by M. Foster.

- Have Chair C. Ryan invite NERAC's Cybersecurity discipline members to the December Interoperability Committee meeting.
- Seconded by J. Griffin.
 - In Favor: All.
 - Opposed: None.
 - Abstain: None.
- The motion passed.

New Business Unforeseen by the Chair

- The Full Council voted to approve the TICP, which has now been signed by NERAC Chair Chief J. Gilliland as well.
- The TICP will be sent to the Committee and posted on the NERAC website.

MOTION put forth by D. Frizzell.

- Adjourn the meeting.
- Seconded by Chief M. Mansfield.
 - In Favor: All.
 - Opposed: None.
 - Abstain: None.
- The motion passed.

*** Next Meeting: December 13, 2022 ***

ATTENDEES-COMMITTEE MEMBERS

Mike Collins: Beverly Public Services & Engineering
 Tyler Dechene: Middleton Fire Department
 Mark Foster: Beverly Emergency Management*
 Dave Frizzell: MetroFire
 Joe Griffin: Greater Boston Police Council
 Chief Michael Mansfield: Andover Fire Rescue
 Chris Ryan: North Shore Regional 911 Center*
 Chief Joe Targ: Westford Fire Department
 Chief Rich Patterson: Dracut Fire Department
 Dave Spinosa: Essex County Sheriff's Department*

ATTENDEES-OTHER

Stephanie Brown: Beverly Public Safety Dispatch
 Lauren Sacks: Metropolitan Area Planning Council

ABSENT

Jon Brickett: Northeast EMS Inc.*
Charlie Dunne: Greater Boston Police Council
Brian Roberts: Fire District 14
Michael Torosian: Ashland Fire Department

The following documents were used/referenced during the meeting:

- November 2022 Meeting Agenda
- September 13, 2022 Meeting Minutes
- October 11, 2022 Meeting Minutes
- FFY19, FFY20, and FFY21 Budget Updates

DRAFT



NORTHEAST HOMELAND SECURITY REGIONAL ADVISORY COUNCIL

Interoperability Committee Meeting

Minutes - DRAFT

December 13, 2022

9:30am

*North Shore Regional 911 Center
18 Manning Avenue, Middleton, MA 01949*

Call to Order

- Chair C. Ryan called the meeting order at 9:32am.
- The Committee did not have quorum.

Approval of Minutes

- No vote was taken to approve the November 8, 2022 meeting minutes because the Committee did not have quorum.

Budget Updates

- FFY19 A.14 ECFCA UHF Receivers will not be fully spent down by the closeout deadline of December 31, 2022, but there is a plan in place.
 - The NERAC Full council has voted to use FFY19 funding (from all committees/projects) that would not be spent down in time for closeout towards payment for an FFY20 Cache Generator invoice, and reallocate equivalent funding from the FFY20 Cache Generator line item back to the FFY19 projects the funding was taken from.
- FFY20 Deadline: June 30, 2023
- FFY21 Deadline: July 31, 2023
- FFY22 Funding: MAPC has received the contracts and is developing the budget spreadsheets and other preparation for that grant cycle.

Project Updates

- *ECFCA UHF Receivers*
 - Tessco and Motorola equipment have been delivered.
 - T. Dechene will provide specifications for the remaining items to conduct the final procurement for this project.
- *ECCOPA Radio Cache*
 - Radios, mics, and chargers were delivered.
 - The spare batteries have not been delivered, and Motorola has not heard a timeline update from the factory.
 - Motorola is working on revised invoices that align with the quotes so that MAPC can pay for the items that were received.
- *Fire District 5 and 15 Portable Radio Cache*
 - POs were issued for the harnesses and backpacks.
 - The harnesses were delivered.
 - Backpacks ETA: June 2023
 - Multi-unit chargers ETA: mid-January 2023
- *Fire District 6 Communications Upgrades*

- The majority of work for this project has been completed. All that is remaining is the installation of the Motorola equipment and a few related items.
- MAPC is determining what documentation is needed in order to pay them for the work completed, based on the way the bid pricing was broken out and some invoice discrepancies.
- Motorola equipment ETA: late January 2023
- *Littleton All-Band Console Upgrades*
 - Expected April to May 2023 completion, due to equipment lead times.
 - The Committee discussed structuring future procurements to break work into tasks that can be paid as they are completed.
- *Metrofire North District Feasibility Study*
 - The kickoff meeting was held on November 29.
 - Site visits are being scheduled and occurring this week.
 - CDWG will have Task 2: Assessment of Existing Communications Infrastructure completed prior to the January Committee meeting.
 - Then the consultant will provide us with timelines for Task 3: Outline of Necessary Communications Capabilities, and drafts of Task 4: Improvement Plan Development for Committee review/feedback.
 - Final draft/project completion is due by May 1, 2023.
- *Microwave Routers and Switches*
 - The PO was issued to HiQ for all equipment from the second round RFQ.
 - HiQ has received most of the equipment, aside from splitter cables that they expect at the end of this month, then they will ship all components.
- *Radio Programming Initiative*
 - Documents approved by MAPC legal were included in the meeting packet.
 - The Committee was not able to vote to accept these documents because they did not have quorum.
- *Next Priorities?*
 - The Committee reviewed the “Upcoming Interop Projects” document and discussed which projects should be prioritized to handle next based on grant deadlines, urgency, and expected lead times. Priorities were determined to be:
 - ECFCA UHF Receivers remaining items.
 - FD-5/15 Wide Area VHF
 - FD-6 MW Groton to Westford
 - FD-5/15 Mobile Gateway Radios and Recorders

Fire District 14 Equipment Disposal

- *Motorola 7500 Consoles Transfer*
 - The MOUs have been signed by Westford and NSR911, and are in the signature process at MAPC.
 - Once both MOUs are fully executed, a letter will be sent to Ashland Fire Department releasing them from responsibility and Westford/NSR911 can arrange to pick up the equipment.
- *Radio Consoles, Microphones, and Monitor Disposal*
 - MAPC is working on the necessary documents for disposal.

MEMA GIS Presentation

- This presentation was postponed to the January meeting.

Cybersecurity in Interoperability and Information Sharing

- Ed Chao, one of NERAC's two Cybersecurity representatives on the Council attended virtually to discuss Cyber projects and overlaps with the Interop Committee's work.

New Business Unforeseen by the Chair

- The NERAC@mapc.org email account will be used for future meeting invitations (current one will be cancelled and replaced) and official Committee communications.
- EOPSS is requiring Training & Exercise AARs to address communications components, including for Tech Rescue Drills.
- The HMCC submitted a letter to the NERAC Full Council detailing concerns regarding hospital/ambulance capacity issues, in hopes that this would trigger a conversation between EOPSS and HHS leadership.
- The January meeting will have a hybrid participation option.
- BAPERN is upgrading all infrastructure and will consider requesting NERAC funding in FFY23.

*** Next Meeting: January 10, 2023 ***

ATTENDEES-COMMITTEE MEMBERS

Tyler Dechene: Middleton Fire Department

Dave Frizzell: MetroFire

Joe Griffin: Greater Boston Police Council

Chief Michael Mansfield: Andover Fire Rescue

Chris Ryan: North Shore Regional 911 Center*

Chief Rich Patterson: Dracut Fire Department

ATTENDEES-OTHER

Stephanie Brown: Beverly Public Safety Dispatch

Lauren Sacks: Metropolitan Area Planning Council

ABSENT

Jon Brickett: Northeast EMS Inc.*

Mike Collins: Beverly Public Services & Engineering

Charlie Dunne: Greater Boston Police Council

Mark Foster: Beverly Emergency Management*

Scott Morrison: Tri-Town School Union*

Brian Roberts: Fire District 14

Dave Spinosa: Essex County Sheriff's Department*

Chief Joe Targ: Westford Fire Department

Michael Torosian: Ashland Fire Department

The following documents were used/referenced during the meeting:

- December 2022 Meeting Agenda
- November 8, 2022 Meeting Minutes
- FFY19, FFY20, and FFY21 Budget Updates
- NERAC Radio Programming Initiative Documents:
 - Contract
 - Policies and Procedures
 - Support Request Form
 - Reimbursement Request Form
- Upcoming Interop Projects List

NERAC

Northeast Regional Homeland Security Advisory Council

Budget As Of: 1/5/2023
 Total Grant: \$1,599,724.00
 Grant End Date: 12/31/2022

FFY19
 State Homeland Security
 Program

PLAN				ACTUAL					
Budget				Allocated		Encumbered			LETPA Amount Invoiced
Original	Increases (Decreases)	Current			NOT Allocated		Invoiced	(OVER) Under	
A Communications Interoperability	\$89,364.00	\$76,357.56	\$165,721.56	165,721.56	0.00	164,210.24	107,704.54	1,511.32	61,830.25
	Moved from B	\$50,000.00		A.01 Amesbury Feasibility Study	0.00	x	0.00	0.00	0.00
	Moved from D	\$100,000.00		A.02 CMED MUX Conversion	0.00	x	0.00	0.00	0.00
	Moved from E	\$76,480.00		A.03 District 5 Microwave Tower	0.00	x	0.00	0.00	0.00
	Moved from F	\$90,833.00		A.04 District 5/15 Radio Equipment Upgrades	0.00	x	0.00	0.00	0.00
	Moved from I	\$45,000.00		A.05 Fire District 14 Portable Radios	0.00	x	0.00	0.00	0.00
	Moved from P	\$40,000.00		A.06 NEMLEC Portable Radios	44,330.25	x	44,330.25	44,330.25	44,330.25
	Moved to C	-\$22,920.00		A.07 Zion Hill Generator	0.00	x	0.00	0.00	0.00
	Moved to K	-\$20,950.00		A.08 Field Communications Unit Upgrades	16,491.13	x	16,491.13	16,491.13	0.00
	Moved to K	-\$90,000.00		A.09 COML Programming BF/OT Support	0.00	x	0.00	0.00	0.00
	Moved from L	\$1,566.50		A.10 CMED Consolette	0.00	x	0.00	0.00	0.00
	Moved to O	-\$12,537.00		A.11 North Shore Regional 911 Center Shelter W	0.00	x	0.00	0.00	0.00
	Moved to K	-\$82,127.01		A.12 Fire District 5/15 Simulcast Equipment	11,883.16	x	11,883.16	11,883.16	0.00
	Moved to O	-\$2,820.00		A.13 Pow Wow Hill Tower Feasibility Study	35,000.00	x	35,000.00	35,000.00	17,500.00
	Moved to O	-\$524.80		A.14 ECFA UHF Receivers	58,017.02	x	56,505.70	0.00	1,511.32
	Moved to K	-\$1,500.97							
	Moved to O	-\$41,875.00							
	Moved to N	-\$19,915.51							
	Moved to L	-\$12,663.92							
	Moved to L	-\$7,525.19							
	Moved from L	\$2,201.46							
	Moved to I	-\$14,364.00							

Northeast Regional Homeland Security Advisory Council

PLAN				ACTUAL						
Budget				Allocated			Encumbered			LETPA Amount
Original	Increases (Decreases)		Current		NOT Allocated		Invoiced	(OVER) Under	Invoiced	
\$414,299.00		-\$26,565.73	\$387,733.27	387,192.43	540.84	268,714.23	117,481.40	119,019.04	0.00	
	Moved to C	-\$26,565.73		B.01 Amesbury Feasibility Study	0.00	x	0.00	0.00	0.00	
				B.02 COML/COMT Training	0.00	x	0.00	0.00	0.00	
				B.03 Communications Unit Upgrades	7,959.60	x	0.00	0.00	7,959.60	
				B.04 Fire District 5/15 Portable Radio Cache	119,940.56	x	119,940.56	117,481.40	0.00	
				B.05 Fire District 5/15 Simulcast UHF	15,000.00	x	0.00	0.00	15,000.00	
				B.06 Fire District 5/15 Wide Area VHF	85,000.00	x	0.00	0.00	85,000.00	
				B.07 Fire District 6 Communications Upgrades	146,773.67	x	146,773.67	0.00	0.00	
				B.08 Zion Hill Generator	0.00	x	0.00	0.00	0.00	
				B.09 Pow Wow Intermod Study	0.00	x	0.00	0.00	0.00	
				B.10 Littleton Consolette Upgrades	2,000.00	x	2,000.00	0.00	0.00	
				B.11 ECFA UHF Receivers	2,518.60	x	0.00	0.00	2,518.60	
				B.12 Microwave Routers and Switches	8,000.00	x	0.00	0.00	8,000.00	

NERAC

Northeast Regional Homeland Security Advisory Council

Budget As Of: 1/5/2023
Total Grant: \$1,469,035.23
Grant End Date: 7/31/2023

FFY21
State Homeland Security
Program

PLAN				ACTUAL						
Budget				Allocated		Encumbered			LETPA Amount Invoiced	
Original	Increases (Decreases)	Current	NOT Allocated			Invoiced	(OVER) Under			
\$384,000.00	\$0.00	\$384,000.00		382,364.39	1,635.61	299,642.20	0.00	84,357.80	0.00	
				B.01 ECFA VHF Combiner Upgrade	8,826.56	x	0.00	0.00	8,826.56	0.00
				B.02 ECFA UHF Wide Area Network Upgrades	40,000.00	x	0.00	0.00	40,000.00	0.00
				B.03 Essex County Chiefs of Police Radio Cache	168,660.60	x	168,660.60	0.00	0.00	0.00
				B.04 Littleton Console Upgrades	21,703.79	x	21,703.79	0.00	0.00	0.00
				B.05 Metrofire North District Feasibility Study	30,000.00	x	29,370.00	0.00	630.00	0.00
				B.06 NERAC Radio Programming Initiative	15,000.00	x	0.00	0.00	15,000.00	0.00
				B.07 Field Communications Unit 20/60 Upgrades	13,000.00	x	0.00	0.00	13,000.00	0.00
				B.08 Woburn/Zion Hill Generator	0.00	x	0.00	0.00	0.00	0.00
				B.09 Microwave Routers and Switches	40,000.00	x	37,470.00	0.00	2,530.00	0.00
				B.10 Fire District 6 Communications Upgrades	41,173.44	x	41,173.44	0.00	0.00	0.00
				B.11 FD-5/15 Radio Cache Chest Harnesses & B	4,000.00	x	1,264.37	0.00	2,735.63	0.00

NERAC

Northeast Regional Homeland Security Advisory Council

Budget As Of: 12/12/2022

Total Grant: \$1,414,829.50

Grant End Date: 7/31/2024

FFY22

State Homeland Security
Program

PLAN				ACTUAL						
Budget				Allocated		Encumbered			LETPA Amount Invoiced	
Original	Increases (Decreases)	Current	NOT Allocated			Invoiced	(OVER) Under			
\$419,384.00		\$0.00	\$419,384.00	419,384.00	0.00	0.00	0.00	419,384.00	0.00	
				H.01 COML/COMT Radio Programming Initiative	15,000.00	x	0.00	0.00	15,000.00	0.00
				H.02 FD-6/MW Groton to Westford/Communicatic	143,384.00	x	0.00	0.00	143,384.00	0.00
				H.03 Greater Boston Police Council Microwave S	46,000.00	x	0.00	0.00	46,000.00	0.00
				H.04 Topsfield Radio Feasibility Study	35,000.00	x	0.00	0.00	35,000.00	0.00
				H.05 NSR911 VHF Combiner	50,000.00	x	0.00	0.00	50,000.00	0.00
				H.06 FD-5/15 Mobile Gateway Radios and Record	60,000.00	x	0.00	0.00	60,000.00	0.00
				H.07 Wide Area Network VHF Consolette Radios	70,000.00	x	0.00	0.00	70,000.00	0.00

A map of the METROFIRE North District, outlined in blue. The district covers a large area around Boston, including parts of Middlesex, Suffolk, and Norfolk counties. Major cities and towns shown include Billerica, Wilmington, Lynnfield, Peabody, Wakefield, Lynn, Nahant, Revere, Chelsea, Winthrop, Boston, Cambridge, Somerville, Medford, Arlington, Waltham, Watertown, Newton, Brookline, Dorchester, Needham, and Wollaston. Major highways like I-93, I-95, I-495, and various state routes are marked. The text "METROFIRE North District" is overlaid in large red letters.

METROFIRE North District

Report on Metrofire North Radio Feasibility Study

Draft Report

January 5, 2023

Introduction

The purpose of this study is to identify ways to improve interoperable communications amongst the fire departments across the Metrofire North District that uses this channel for large scale incidents, for the coordination and control of mutual aid resource responses to an incident, staging, or station coverage.

Metrofire North District is comprised of 18 Fire Departments

The project has been categorized into four tasks as follows:

Task 1-2: the consultant is required to identify the communications service levels, transmit & receive locations, and equipment that currently exists on the Metrofire North District radio channel.

Task-3: based on data obtained in Task-2, coverage maps to depict areas of coverage and no coverage.

Task 4: will identify steps that can be taken to enhance communications capabilities to portable street level coverage within the Metrofire North District's service area.

**THIS REPORT PROVIDES THE REQUIRED INFORMATION REQUESTED
IN TASKS-1 THROUGH TASKS-3**

Report on Metrofire North Radio Feasibility Study

Radio Site Information | Location – Ownership - Contacts

Site	Address	Site Owner	Primary Contact	Secondary Contact	Note	Comments
Zion Hill	25 Waltham St, Woburn, MA	Comcast, Inc Managed By TCI Towers	BAPERN John Dooley 781 389 2200	Cambridge FD Tech Svcs 617 349 4978	Metrofire equipment in BAPERN racks inside Comcast shelter	TCI manages site/ any discussion with TCI & Comcast shall be through BAPERN
Cambridge FD HQ	491 Broadway, Cambridge, MA	Cambridge FD	Cambridge FD Tech Svcs 617 349 4978	Cambridge FD Tech Svcs 617 349 4978	Metrofire equipment in CFD racks	Equipment in existing room moving to IT room as part of building renovation
Belmont Hill	780 Concord St, Belmont, MA	City of Belmont	Cambridge FD Tech Svcs 617 349 4978	Cambridge FD Tech Svcs 617 349 4978	SBA owns tower on Town land; Metrofire equipment in Belmont shelter	Any discussion with SBA shall be through the Town of Belmont
Hanscom Field	Civilian Air Terminal, 200 Hanscom Drive, Lexington, MA	Massport	Cambridge FD Tech Svcs 617 349 4978	Shawn Anderson, Massport 617 568 5626	Equipment room in penthouse shared with Massport radio system	
Massport Logan	250 Terminal Ave, Boston, MA	Massport	Cambridge FD Tech Svcs 617 349 4978	Cambridge FD Tech Svcs 617 349 4978	Equipment room on 20 th floor shared with Massport radio system	
Revere	TF Carroll Way, Revere, MA	City of Revere	Cambridge FD Tech Svcs 617 349 4978	Jay Mazzolla Metro North RECC 781 629 9260		
Parkside Place	704 Huron Ave, Cambridge, MA	To be determined	Cambridge FD Tech Svcs 617 349 4978	Cambridge FD Tech Svcs 617 349 4978	Metrofire equipment in CFD racks	

Report on Metrofire North Radio Feasibility Study

Site Technical Data / FCC License Info

METROFIRE – NORTH UTILIZES A SINGLE T-BAND FREQUENCY OF 482.2500/485.2500 MHZ AND LICENSED ON CALL SIGN WQHR375

Site	Function	Coordinates	Frequency [MHZ]	Radiated Power [watts]	License Antenna Height [ft]	ASR	Connectivity to CFD HQ	Comments
Zion Hill	Transmit & Receive Site	42 27 19.9 ** 71 10 46.1	T482.2500/ R485.2500	200	T180' R160'	1019307	BAPERN / VZ Fiber	**Coordinates from ASR; incorrect coordinates on FCC license [for nearby Water Tank on Zion Hill Road]
Cambridge FD	Receiver Voter Site	42 22 31.2 71 06 52.9						
Belmont Hill	Receive-only site	42 23 57.6 71 11 18.2	R485.2500	D/N/A	100'	None	Belmont & Cambridge Fiber	
Hanscom Field	Receive-only site	42 27 47.4 71 17 29.2	R485.2500	D/N/A	55'	None	Massport Fiber / BoNet	No transmitters allowed
Massport Logan	Receive-only site	42 21 57.0 71 01 00	R485.2500	D/N/A	255'	None	Massport Fiber / BoNet	No transmitters allowed
Revere	Receive-only site	42 24 35.1 71 01 17.9	R485.2500	D/N/A	50'	None	BoNet	
Parkside Place	Receive-only site	42 22 51.0 71 09 16.0	R485.2500	D/N/A	245'	None	Cambridge Fiber	

Metrofire North Site Equipment

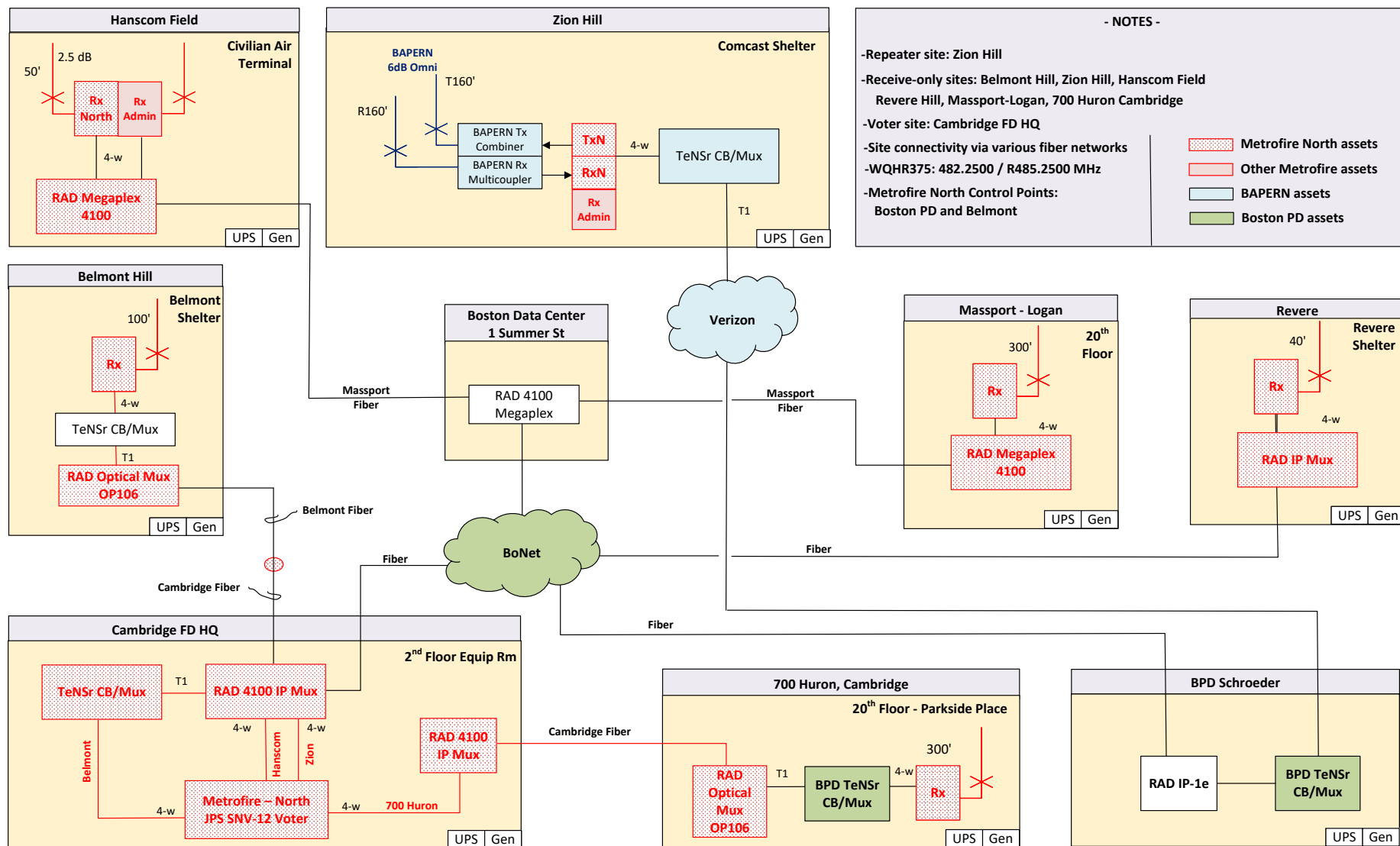
MOST OF THE METROFIRE NORTH EQUIPMENT WAS PURCHASED FROM MOTOROLA AND INSTALLED IN 2016

METROFIRE NORTH OWNED EQUIPMENT:

	Motorola			RAD 4100			UPS	Isobar
Site	Receiver	Dual Receiver	Repeater	Multiplexor			APC	Surge
	GPW8000	GPW8000	GTR8000	OP 106	4100	IP Mux- 1E	PRO-1000	Protection
700 Huron	X			X	X			
Belmont		X		X	X		X	X
Cambdridge FD HQ					X			
Massport Hanscom		X			X			
Massport Logan	X				X			
Revere	X					X		
Zion Hill			X					

Report on Metrofire North Radio Feasibility Study

- METROFIRE NORTH FIRE RADIO SYSTEM -



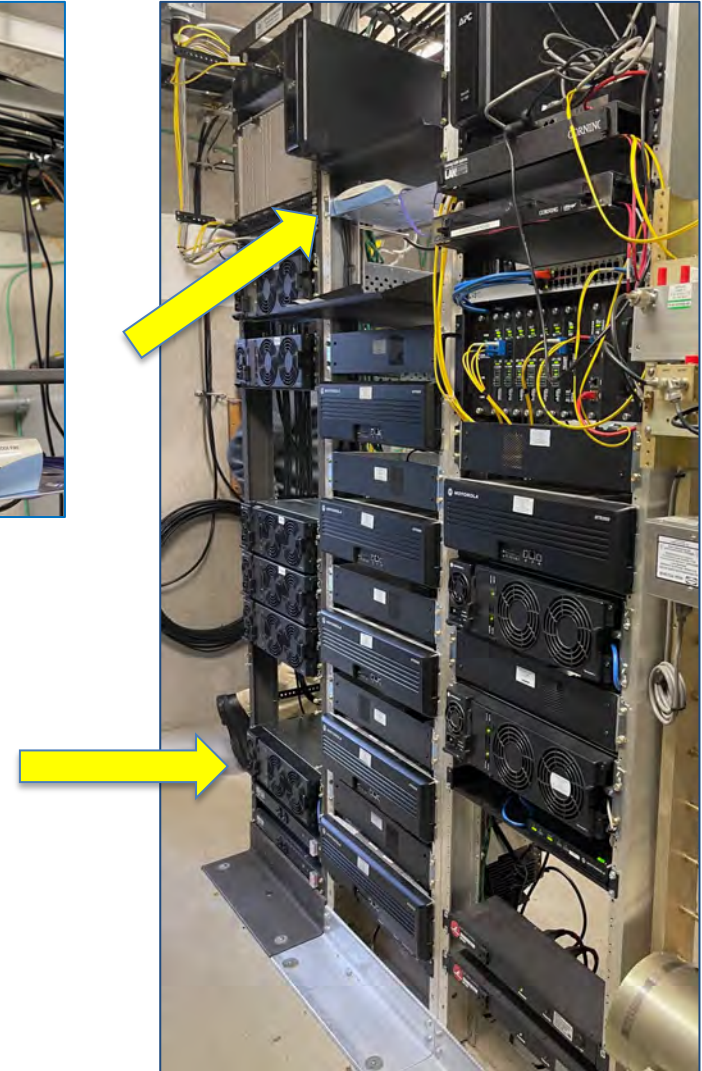
OVERVIEW OF EXISTING TRANSMITTER AND RECEIVER SITES

Report on Metrofire North Radio Feasibility Study

Belmont Hill 1 of 2

BELMONT HILL

- There is a 120' monopole structure located 780 Concord Ave, Belmont
- Coordinates: 42 23 57.6 / 71 11 18.2
- The structure is owned by SBA #13736-A
- The Town of Belmont leases the land to SBA
- The Town has rent free access for installing antennas on the structure as the monopole is on Town land
- Metrofire has one UHF whip antenna mounted on the monopole at approx. 100'
- Belmont has an approx. 8' x 12' concrete communications shelter
- Metrofire-North receiver is mounted in the Cambridge FD equipment rack
- The receiver is part of a six site receive Metrofire voting system
- Connectivity to/from this site from Cambridge FD is via Cambridge and Belmont fiber
- The site has UPS backup power
- The site has an emergency generator
- The site appears to meet R56 grounding but may require minor upgrade



Report on Metrofire North Radio Feasibility Study

Belmont Hill 2 of 2



Report on Metrofire North Radio Feasibility Study

Cambridge Fire Headquarters

CAMBRIDGE FIRE

- Located at 491 Broadway, Cambridge
- Coordinates: 42 22 31.2 / 71 06 52.9
- There is no Metrofire North RF equipment located at this site
- Site serves as voting point for the Metrofire North system
- Radio equipment is installed in a secure approx. 8' x 12' room on the second floor
- Equipment room to be relocated to alternate location under building renovation project
- The site has battery backup power
- The site has an emergency generator
- The site appears to meet R56 grounding but may require minor upgrade



Report on Metrofire North Radio Feasibility Study

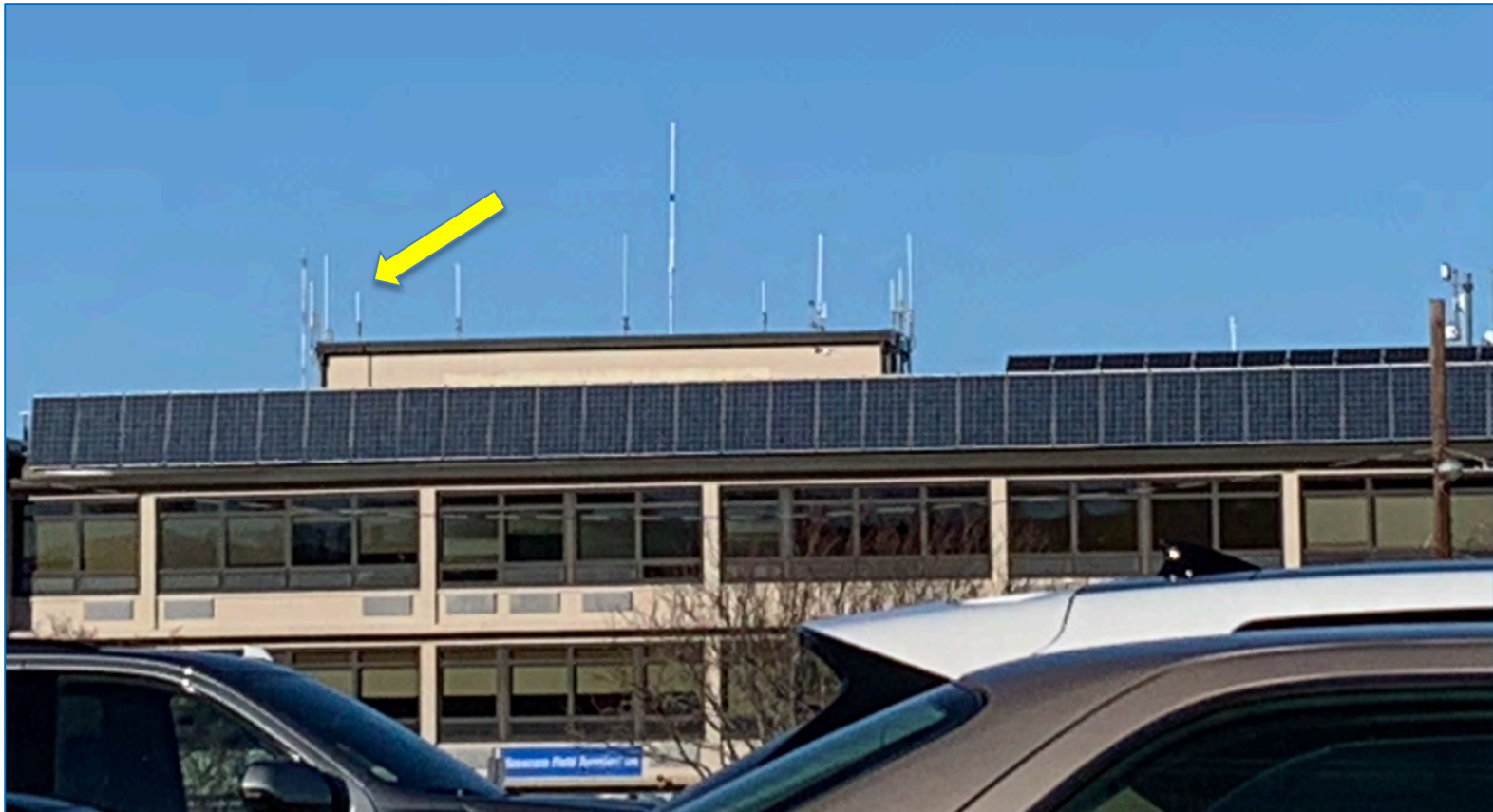
Hanscom Field 1 of 2

HANSCOM FIELD

- The site is located at the Civilian Air Terminal, 200 Hanscom Road, Bedford
- Coordinates: 42 27 47.4 / 71 17 29.2
- Metrofire-North has a receiver located in a secure penthouse equipment room
- The UHF omnidirectional antenna is mounted on the Penthouse roof at approximately 55' AGL
- The receiver is part of a six site receive Metrofire voting system
- Connectivity to/from this site to Cambridge FD is via Massport fiber to 1 Summer St, Boston, then via BoNet to CFD
- The site has UPS backup power
- The site has an emergency generator
- The site appears to meet R56 grounding but may require minor upgrade



Hanscom Field 2 of 2

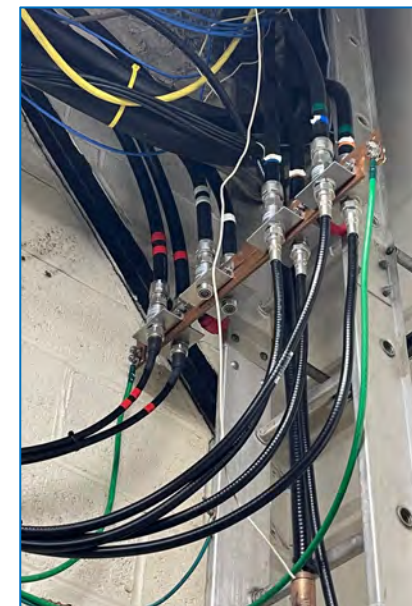
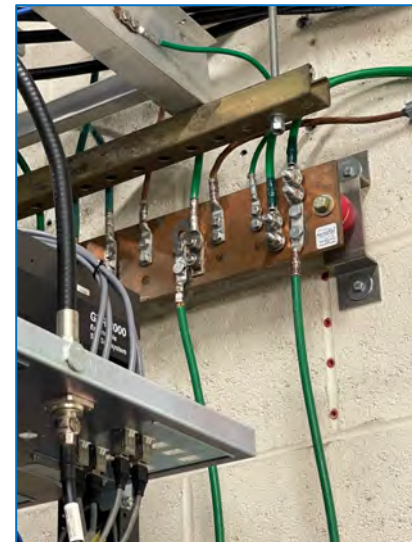


Report on Metrofire North Radio Feasibility Study

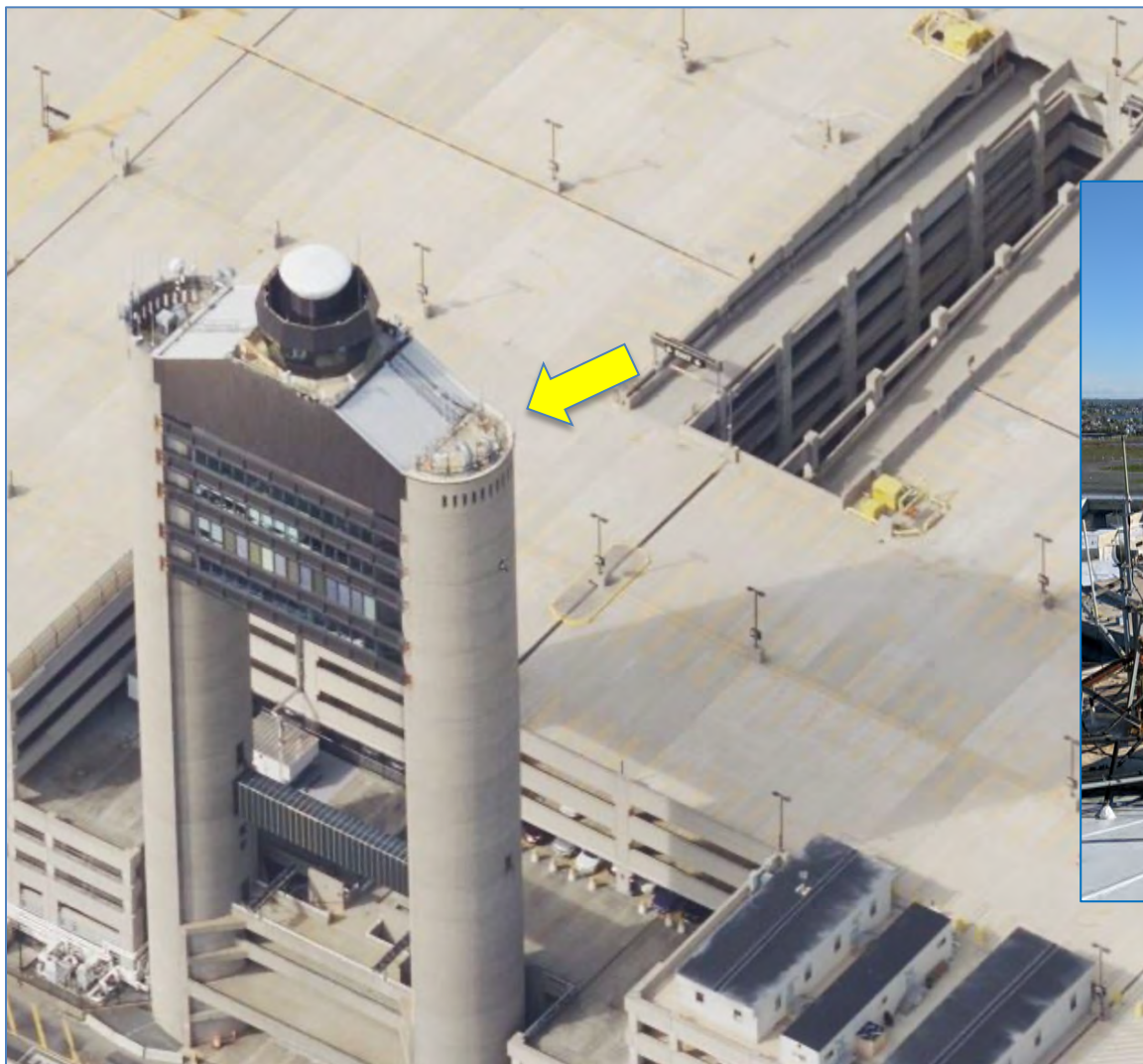
Massport Logan 1 od 2

MASSPORT LOGAN:

- The 20-floor control tower building is located at Logan Airport, 250 Terminal Ave, Boston
- Coordinates: 42 21 57.0 / 71 01 06.0
- The building is approx. 255' tall
- Metrofire-North has a receiver located in a secure top floor equipment room approx. 12' x 16'
- Metrofire-North receiver is mounted in the Cambridge FD equipment rack
- The UHF omnidirectional antenna is mounted on the tower rooftop
- The receiver is part of a six site receive Metrofire voting system
- Connectivity to/from this site from Cambridge FD is via BoNet
- The site has UPS backup power
- The site has an emergency generator
- The site appears to meet R56 grounding but may require minor upgrade



Massport Logan

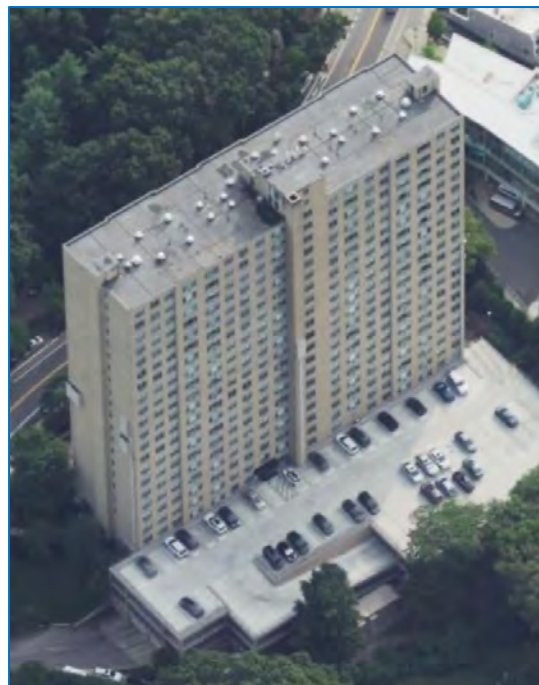


Report on Metrofire North Radio Feasibility Study

Parkside Place, Cambridge 1 of 2

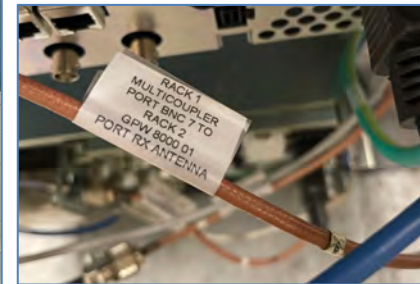
PARKSIDE PLACE:

- The 20-floor apartment building is located at 704 Huron Avenue, Cambridge
- Coordinates: 42 22 51.0 / 71 09 16.0
- The structure is approx. 245' tall
- Metrofire-North has a receiver located in a secure rooftop penthouse room
- Metrofire-North receiver is mounted in the Cambridge FD equipment rack
- Metrofire receiver is connected to the Cambridge shared UHF antenna via receiver multicoupler
- The shared UHF omnidirectional antenna that is mounted on the penthouse wall
- The receiver is part of a six site receive Metrofire voting system
- Connectivity to/from this site from Cambridge FD is via Cambridge fiber
- There is UPS power
- The site has an emergency generator
- The site appears to meet R56 grounding but may require minor upgrade



Report on Metrofire North Radio Feasibility Study

Parkside Place, Cambridge 2 of 2

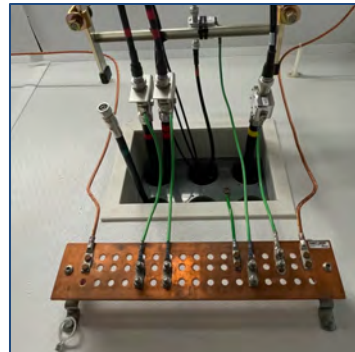


Report on Metrofire North Radio Feasibility Study

Revere 1 of 2

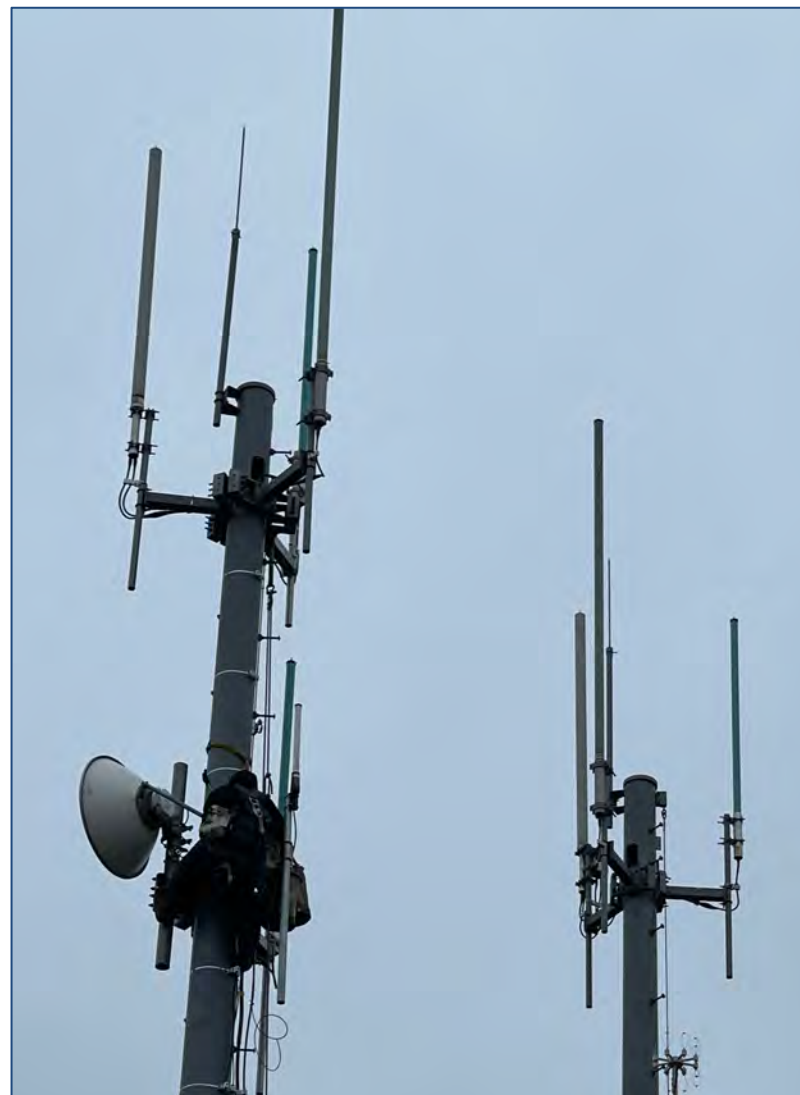
REVERE:

- There are two [2] monopoles located at T.F. Carroll Way, Revere
- The site is owned by the City of Revere
- Coordinates: 42 24 35.1 / 71 01 17.9
- The monopole structures are approx. 50' tall
- Metrofire-North receiver is mounted in the Cambridge FD equipment rack
- Metrofire receiver is connected to a shared UHF antenna via receiver multicoupler
- The shared UHF omnidirectional antenna is mounted on the monopole at approx. 45'
- The receiver is part of a six site receive Metrofire voting system
- Connectivity to/from this site from Cambridge FD is via BoNet
- Utilizes 48 v battery system
- The site has an emergency generator
- The site appears to meet R56 grounding but may require minor upgrade



Report on Metrofire North Radio Feasibility Study

Revere 2 of 2



Report on Metrofire North Radio Feasibility Study

Zion Hill, Woburn 1 of 2

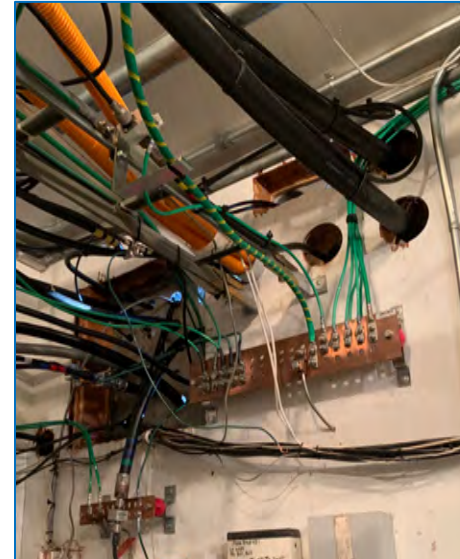
ZION HILL

- There is an approx. 265' guyed tower located at 25 Waltham St, Woburn
- The structure is owned by Comcast and managed by CTI Towers #10465; FCC Registration #1019307
- Radio equipment is installed in a secure in a fenced-in 8 x 10 wood shelter
- Coordinates: 42 27 19.9 / 71 10 46.1
- BAPERN leases tower and shelter space from Comcast
- Metrofire-North receiver is mounted in the BAPERN equipment rack
- Metrofire repeater utilizes the BAPERN receiver multicoupler and transmitter combiner
- BAPERN utilizes two [2] UHF antennas [one transmit & one receive]
- BAPERN receive antenna mounted at approx. 160' and transmit at 180'
- The site has UPS backup power
- The site has an emergency generator
- The site appears to meet R56 grounding but may require minor upgrade



Report on Metrofire North Radio Feasibility Study

Zion Hill, Woburn 2 of 2



“As Is” EXISTING COVERAGE CONDITIONS

Coverage Analysis 1 of 2

❖ **Introduction**

The coverage prediction maps shown on the following pages illustrate predicted UHF handheld PORTABLE radio in-street coverage for the Metrofire North fire radio system.

Note that both Talkout and Talkback coverage maps are provided.

TALKOUT [outbound] is the Dispatcher transmitting to a handheld portable and/or mobile radio.

TALKBACK [inbound] is a handheld portable or mobile radio transmitting to the Dispatcher.

Radio reception is based on where the user is in the coverage footprint, the terrain, proximity to the transmitters and receivers and how well the RF system is designed. Other elements that may affect coverage includes the tower effect on the antenna; transmit power; vegetation and buildings [signal shadowing and attenuation]. Other variables affecting coverage may also include co-channel, or adjacent channel interference that a user may receive from neighboring systems that are licensed on the same frequency.

Coverage Analysis 2 of 2

RFP REQUIREMENT

Determine the ultimate system performance objectives necessary in order to reach 90% or better street level portable coverage for both transmit and receive for the entire coverage area.

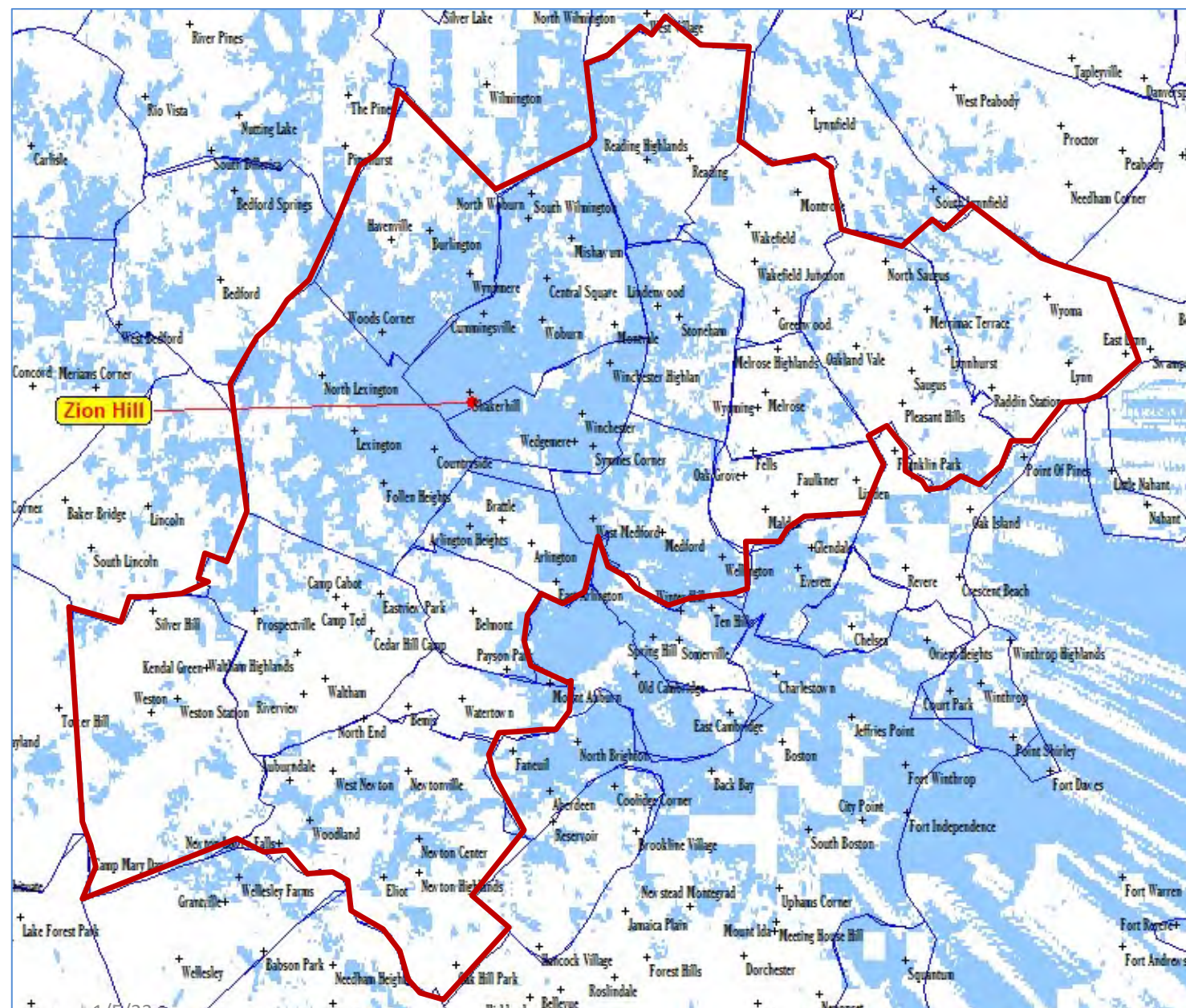
1. Talk-out coverage – 99% street level receive signal strength at -95dBm.
2. Talk-in coverage – 90% street level coverage must be able to hit 1 or more receivers at -95dBm.

PERCENT RELIABILITY is the message success rate within the predicted coverage area. All radio coverage is based on probability theory as radio coverage cannot be guaranteed 100% of the time. Radio coverage at a specific location from a distant transmitter can be specified as a percentage probability of successful communication [for Metrofire the percentage of time that the signal is greater than -95 dBm within the coverage area].

MAP ACCURACY is based upon ComStudy software algorithm, propagation model selected, and the terrain database. Coverage maps provided by other sources may show different results than those provided in this report based on alternate prediction software and/or prediction models used. We feel that our maps provide realistic coverage prediction.

CDCG's coverage maps do not represent or imply any warranty by CDCG that the definition of 90% / 99% are satisfied at all points in the coverage area

Report on Metrofire North Radio Feasibility Study



Existing "As Is"

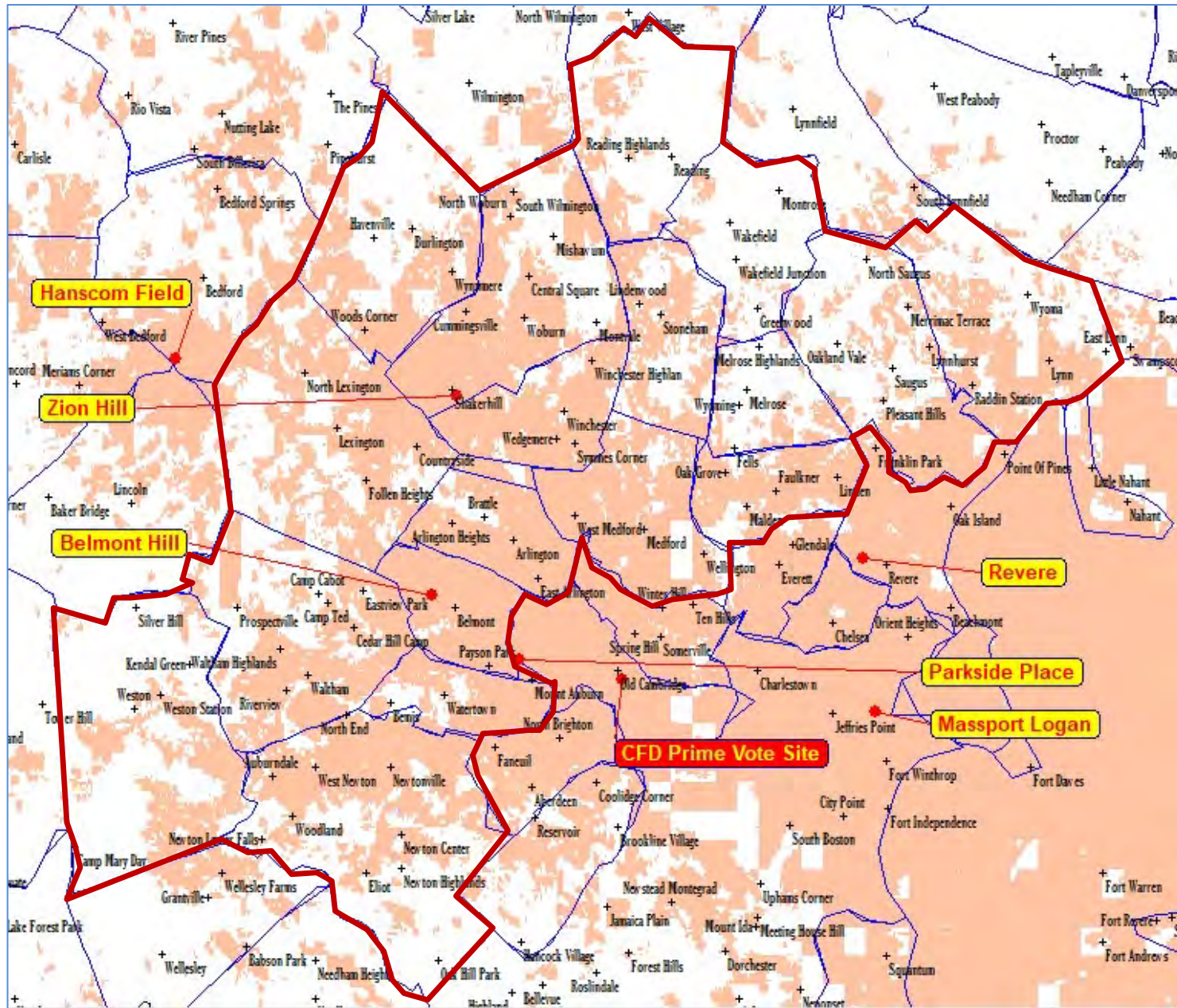
TALKOUT
COVERAGE

Portable Radio
In-Street
Coverage

99% Reliability

-95 dBm

Report on Metrofire North Radio Feasibility Study



Existing “As Is”

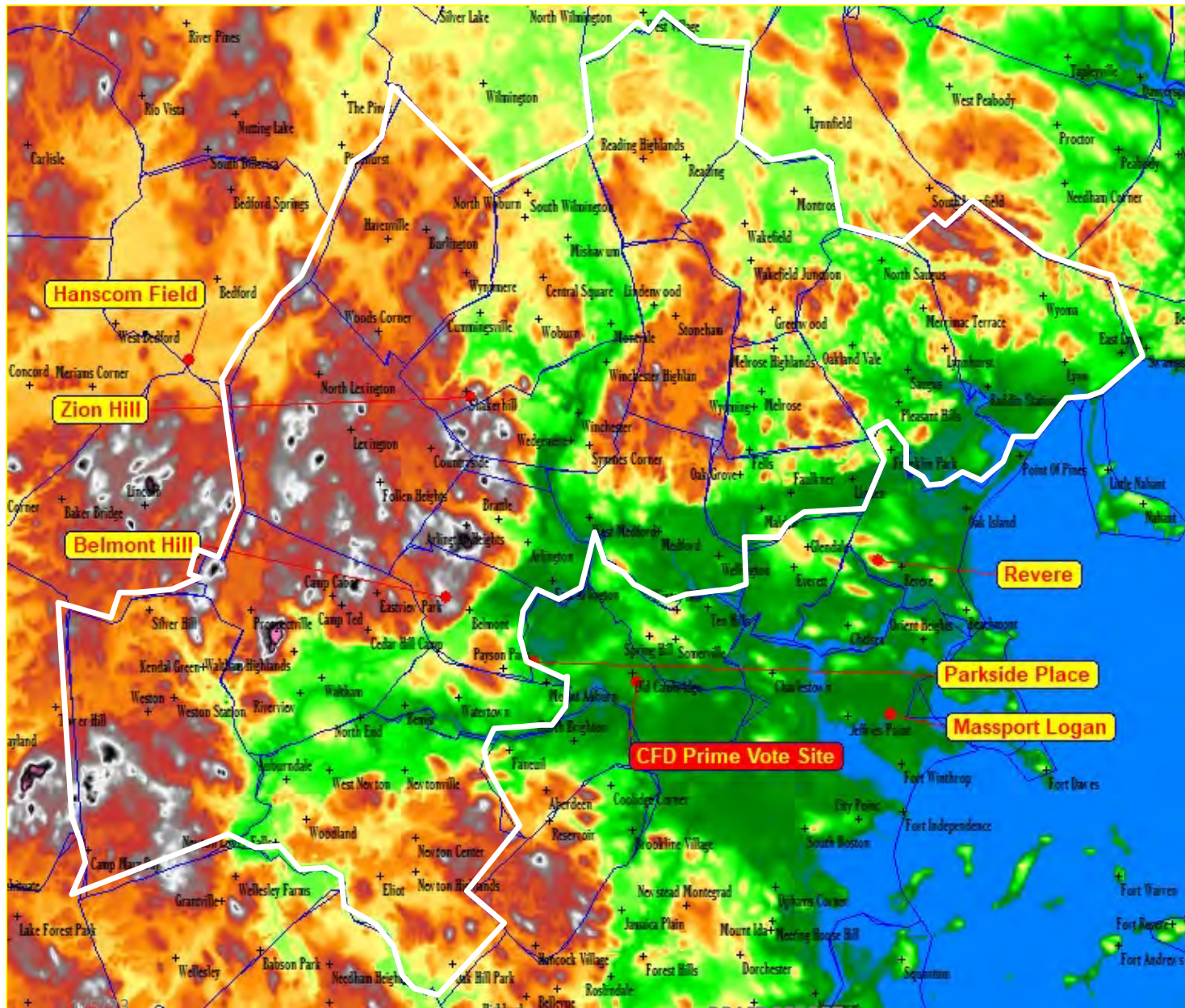
TALKBACK COVERAGE

Portable Radio In-Street Coverage











90% Reliability

-95 dBm

Report on Metrofire North Radio Feasibility Study



Metrofire North Area Terrain

Clr	Level [ft]
	0.00
	10.00
	50.00
	100.00
	150.00
	200.00
	250.00
	300.00
	350.00
	400.00



Radio Programming Support Request Form

To improve interoperability and ensure first responder radios implement the MA Tactical Channel Plan, the Northeast Homeland Security Regional Advisory Council (NERAC) is sponsoring free radio programming assistance for first responder departments. Mobile/portable radio programming and channel organization services will be provided by trained COMLs (Communication Unit Leaders) and/or COMTs (Communications Unit Technicians).

Municipal first responder departments (e.g., Law Enforcement, Fire Services, Municipal EMS) within NERAC's 85 municipalities that do not have internal personnel capable of aligning their radios with the MA Tactical Channel Plan are eligible. To request services, please complete this form above the dotted line and submit it to NERAC@mapc.org.

Requesting Department: _____

Primary department contact for this request:	Name: _____	Title: _____
	Email: _____	Phone: _____
Please identify the discipline these radios are used by: <input type="checkbox"/> Police / <input type="checkbox"/> Fire / <input type="checkbox"/> EMS / <input type="checkbox"/> Other: _____		
Radio specifications: (Make, model, and quantity of each.)		Location(s) where programming work will be performed:
Is there any additional information the COML/COMT should know about these radios?		
Department head authorizing this request: (e.g., Chief of Department)	Name: _____	Title: _____
	Signature: _____	Date: _____

Thank you! If approved, you will be connected with a COML/COMT to schedule the programming. Please confirm with the NERAC assigned COML/COMT that the code plug has been approved in writing by a NERAC Interoperability Committee representative prior to scheduling any programming work.

- - - - -
- FOR NERAC USE -
- - - - -

Assigned COML/COMT:	Name: _____	Department: _____
	Email: _____	Phone: _____
Total expected hours of work needed to program the radios listed above: _____		

- - - - -
- AFTER WORK IS COMPLETE -
- - - - -

I certify that I completed programming for all radios listed above to implement the MA Tactical Channel Plan, in accordance with the NERAC approved code plug and during the hours listed in the Backfill/Overtime Reimbursement Request submitted to NERAC by my employing agency.	Assigned COML/COMT:	Name: _____
		Signature: _____
		Date: _____
I certify that the assigned COML/COMT completed programming for all radios listed above to implement the MA Tactical Channel plan.	Requesting Department Head:	Name: _____
		Signature: _____
		Date: _____

Exhibit A

NERAC Radio Programming Initiative POLICIES AND PROCEDURES

Eligibility

1. In order for a COML/COMT to be eligible to conduct programming services through the NERAC Radio Programming Initiative, all of the following criteria must be met:
 - a. The individual must be a trained COML/COMT and be able to provide MAPC/NERAC¹ with proof upon request.
 - b. The COML/COMT must be an hourly municipal employee eligible to perform overtime work as determined by their department.
 - c. An MOU pertaining to the initiative must be in effect between the **COML/COMT's** municipal employer and MAPC/NERAC.
2. In order for a first responder department to be eligible to request programming services through the NERAC Radio Programming Initiative, all of the following criteria must be met:
 - a. The department must be a municipal public safety first responder department, as determined by MAPC/NERAC.
 - b. The first responder department must operate within at least one of the 85 municipalities in the NERAC region.
 - c. The first responder department must submit a complete NERAC Radio Programming Support Request Form, signed by the department head authorizing the request.

Process and Programming

3. MAPC/NERAC will receive and manage the requests for Radio Programming Support on the Form described in paragraph 2.
4. When a first responder department submits a request, an MAPC/NERAC Interoperability Committee representative² will review for eligibility, approve qualified requests, approve the estimated number of hours it will take a COML/COMT to complete the request, ensure available funding, and direct all approved requests to participating COML/COMTs.
5. When the COML/COMT accepts an assignment, MAPC/NERAC will connect that COML/COMT with the requesting first responder department via an introductory email.
6. The COML/COMT is responsible for contacting the requesting first responder department to obtain any additional necessary information and establish a schedule for the programming work. The COML/COMT is also responsible for obtaining approval from their employing municipality for this assignment and the schedule mutually agreed upon with the requesting first responder department.
7. The COML/COMT must submit their plans for programming and code plug(s) to the designated NERAC Interoperability Committee representative for written approval prior to conducting further work.
8. When the plan is approved by the NERAC Interoperability Committee representative, the COML/COMT will conduct the hands-on programming as agreed upon with the requesting first responder department **and the COML/COMT's employing municipality.**

¹ MAPC is the fiduciary for NERAC.

² A position currently held by Dave Spinosa from the Essex County Sheriff's Department and Tyler Dechene from the Middleton Fire Department.

9. When work is complete, the COML/COMT and the authorized point of contact from the requesting first responder department, must sign the designated section of the Radio Programming Support Request Form to attest that to the best of their knowledge, the work was done accurately, the radios function as required by the Massachusetts Tactical Channel Plan, and that the information contained on the Radio Programming Support Request Form regarding the equipment programmed and hours worked are correct.

Payment and Reimbursement

10. **The COML/COMT's department is responsible for compensating the employee for all** time spent providing approved services for the NERAC Radio Programming Initiative as required by law, including travel time (which is not reimbursable by NERAC but may be compensable as required by law or the applicable collective bargaining agreement).
11. The department will be eligible to request reimbursement for approved backfill and overtime costs incurred at a rate of up to \$60 per hour for the COML/COMT's actual authorized work for this initiative.
12. Upon completion **of the work, the COML/COMT's department will submit the NERAC Radio** Programming Reimbursement Request Form and all required backup documentation, including but not limited to timesheets, payroll documentation, and proof of payment to MAPC/NERAC. The department will submit one reimbursement request form per COML/COMT per first responder department for which the work was completed.
13. MAPC/NERAC will process requests for reimbursement for approved costs, with payment terms of a minimum of 60 days.



CONTRACT FOR PROFESSIONAL SERVICES

BY AND BETWEEN THE

**NORTHEAST HOMELAND SECURITY REGIONAL ADVISORY COUNCIL BY AND
THROUGH**

METROPOLITAN AREA PLANNING COUNCIL

AND

[NAME OF MUNICIPALITY]

This Agreement is made and entered into by and between the **NORTHEAST HOMELAND SECURITY REGIONAL ADVISORY COUNCIL** ["NERAC"] by and through the **METROPOLITAN AREA PLANNING COUNCIL** ["MAPC"], a public body politic and corporate established by Chapter 40B, Sections 24 through 29, of the Massachusetts General Laws with its principal office at 60 Temple Place, Boston, Massachusetts, 02111, and **NERAC's** fiduciary agent as of the date of this Agreement, [collectively referred to as "**MAPC/NERAC**"], and **[Name of Municipality]** with its principal office at _____.

Recitals

WHEREAS, the Commonwealth of Massachusetts' Executive Office of Public Safety and Security ["EOPSS"] is the State Administrative Agency for the U.S. Department of Homeland Security ["DHS"] State Homeland Security Program grant ["DHS Grant"] awarded to the Commonwealth of Massachusetts;

WHEREAS, **MAPC**, has executed a contract with EOPSS as fiduciary for **NERAC** to perform work under the DHS grant;

WHEREAS, as part of that grant-funded work, **NERAC** by and through **MAPC** will coordinate a Radio Programming Initiative to assist cities and towns within the **NERAC** region with upgrading their radio systems to incorporate the Massachusetts Tactical Channel Plan;

WHEREAS, **[Name of Municipality]** employs trained Communications Unit Leader(s) ["COML(s)"] and/or Communications Unit Technician(s) ["COMT(s)"] who can perform the necessary radio programming work.

Witnesseth that the parties have AGREED as follows:

Article I



Roles and Responsibilities

1. MAPC/NERAC will provide professional services to undertake and perform all appropriate tasks to facilitate the radio programming work as described in the NERAC Radio Programming Initiative Policies and Procedures attached as Exhibit A and incorporated herein.
2. Within 14 days of the execution of this Agreement by [Name of Municipality], [Name of Municipality] shall provide a list of its employees to MAPC/NERAC that are interested in performing radio programming work for first responder departments in the NERAC region. These individuals must be eligible to perform overtime work and must be trained COMLs and/or COMTs. This list shall include the employee's name, contact information (phone and email), and the date of the employee's most current COML and/or COMT training. By including an employee on this list, the [Name of Municipality] is attesting that the employee successfully completed the COML and/or COMT training identified. Any change in the COML and/or COMT status of an employee on this list shall require the [Name of Municipality] to contact MAPC/NERAC to notify it of the change.
3. MAPC/NERAC shall receive requests from cities and towns in the NERAC region who wish to reprogram their first-responder radios to implement the Massachusetts Tactical Channel Plan. Such requests shall be submitted to MAPC/NERAC on the NERAC Radio Programming Support Request Form.
4. NERAC Council Members or Designee(s) with expertise in this area, will coordinate with MAPC to dispatch appropriate COMLs and/or COMTs as necessary to fulfill the requests from the requesting first responder department.
5. [Name of Municipality] is solely responsible for determining whether the work performed by its COMLs and/or COMTs is performed as part of the COML's and/or COMT's regular work schedule or as over and above the COML's and COMT's regular work schedule.

Article II

Term of Agreement

6. This Agreement shall commence upon execution and continue in effect for a period of two (2) years from that date and shall automatically renew for successive additional periods of two (2) years, not to exceed six (6) years, dependent on the availability of DHS Grant funding approved by NERAC for this purpose.

Article III

Reimbursement for Services

7. NERAC, by and through MAPC, shall reimburse [Name of Municipality] for overtime and backfill related overtime as follows:



- a. Overtime: expenses limited to the additional costs that result from COMLs and/or COMTs working over and above their weekly full-time/part-time schedule as a direct result of performing radio programming work; and
 - b. Backfill related overtime: expenses limited to overtime costs that result from personnel working overtime to perform the duties of the COMLs and/or COMTs who are temporarily assigned to perform radio programming work.
8. **MAPC/NERAC** shall only reimburse **[Name of Municipality]** for actual hours worked by COMLs, COMTs, and backfill personnel for **NERAC**-approved programming requests, regardless of department policy or union contract rules.
9. **MAPC/NERAC** shall reimburse **[Name of Municipality]** for the rate actually paid to the COMLs and COMTs, up to \$60.00 per hour.
10. **[Name of Municipality]** is solely responsible for payment of COMLs' or COMTs' travel time and other fringe benefits, if applicable.
11. Reimbursement requests shall be submitted by **[Name of Municipality]** to **MAPC/NERAC** on the **NERAC Radio Programming Reimbursement Request Form**.

Article IV

Release of MAPC

12. In consideration of the execution of this Agreement by **MAPC**, the **[Name of Municipality]** agrees that simultaneously with the acceptance of what **MAPC/NERAC** tenders as the final payment under this Agreement, the **[Name of Municipality]** will execute, and deliver a release of **MAPC** from all claims, demands, and liabilities arising from, growing out of, or in any way connected with this Agreement. It is agreed that the person who, in fact, executes and delivers said release, shall be authorized and empowered to execute and deliver the same on behalf of **[Name of Municipality]**.

Article V

Indemnification

13. To the extent permitted by law, **NERAC** and **[Name of Municipality]** shall indemnify, defend and hold harmless **MAPC** and all of its officers, agents and employees, against all suits, claims, demands and liabilities of every name and nature, both at law and in equity, based upon or arising out of any gross negligence or wrongful acts taken by **NERAC** and **[Name of Municipality]** in its performance of this Agreement or damages to equipment in the performance of this Agreement or upon **NERAC's** and **[Name of Municipality's]** failure to comply with the terms of this Agreement in the performance of its work, whether by it, its employees, or its Sub-Contractors.

Article VI



Insurance

14. The [Name of Municipality] where not self-insured shall secure, and maintain in effect throughout the term of this Agreement, insurance adequate to meet its obligations hereunder and shall provide MAPC/NERAC with certification of such, if requested.

Article VII

Assignment

15. The parties shall not assign nor transfer their respective interests in this Agreement, in part or in whole, without the prior written consent of the other.

Article VIII

Severability

16. In the event any provision of this Agreement is found by a court of appropriate jurisdiction to be unlawful or invalid, the remainder of the Agreement shall remain and continue in full force and effect.

Article IX

Termination of Agreement

17. This Agreement shall automatically terminate in the event that the DHS Grant funding is no longer available or approved by NERAC for this purpose.
18. In the event of a failure to materially perform by either [Name of Municipality] or MAPC/NERAC, the notice of such breach shall be accompanied by the nature of the failure, and the other party shall set a date at least 60 days later by which the party notified of the breach shall cure the failure. If the party notified of the breach fails to cure within the time as may be required by the notice issued by the notifying party, the notifying party may at its option, terminate the Agreement.
19. Notwithstanding any language to the contrary within this Agreement, [Name of Municipality] or MAPC/NERAC may terminate this Agreement without cause at any time, effective ten days beyond the termination date stated in the written notice of termination. In the event of termination, [Name of Municipality] shall be compensated for reimbursable costs incurred prior to the date of notice of termination. In no event shall [Name of Municipality] be entitled to payment for any services performed after the effective date of termination unless so authorized.

Article X

Compliance with Conflict of Interest Laws

20. The parties warrant and represent to one another that, to the best of their knowledge, no officer or employee of the parties who have participated in the preparation or negotiation of this Agreement, or who will participate in the execution of this Agreement, nor such employee's spouse, parents, children, brothers or sisters, partner, any business organization in which he or she is serving as officer, director,



trustee, partner or employee, nor any person with whom he or she is negotiating or has any arrangement concerning prospective employment, have a financial interest in this Agreement, except as permitted under M.G.L. c. 268A, § 6. The parties further warrant and represent to one another that, to the best of their knowledge, no employee of the parties has a financial interest, either directly or indirectly, in the Agreement except as permitted under G.L. c. 268A, § 7.

Article XI

Governing Law and Jurisdiction

21. This Agreement shall be governed by, construed, and enforced in accordance with the laws of the Commonwealth of Massachusetts. The parties agree to submit their respective jurisdiction and venue to the state and federal courts in the Commonwealth of Massachusetts to resolve any disputes or disagreements that may arise under any provision of this Agreement.

Article XII

Complete Agreement

22. This Agreement, and the Exhibits attached hereto and incorporated herein constitute a total agreement of the parties and supersede all prior agreements and understandings between the parties and may not be changed unless agreed upon in writing by the parties.



IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers on the date written below.

For: NORTHEAST HOMELAND SECURITY REGIONAL ADVISORY COUNCIL

Name: Jason R. Gilliland Date: _____

Title: Chief - NERAC

Chief - Marblehead Fire Department

1 Ocean Avenue
Marblehead, MA 01945

For: [NAME OF MUNICIPALITY]

Name: _____ Date: _____

Title: _____

For: NERAC's HOMELAND SECURITY FIDUCIARY, THE METROPOLITAN AREA PLANNING COUNCIL

Name: Marc Draisen Date: _____

Title: Executive Director

* * * * *

NERAC Radio Programming BF/OT Reimbursement Request Instructions

This workbook contains request forms necessary for reimbursement of radio programming activities that have been previously approved by the Northeast Homeland Security Regional Advisory Council. These forms are required in addition to the other backup documentation listed below.

Cells in this spreadsheet that are locked contain formulas that will autopopulate information entered by the user. You will not need to enter information into any of these cells to fill the form out completely.

Cover Sheet

1. All sections must be filled out completely.
2. Signatures must be from authorized officials who are not being paid by this reimbursement.

Backfill and Overtime Worksheet

1. Reimbursement will be at a rate of up to \$60/hour per person, not to exceed an individual's actual pay rate. The spreadsheet will not accept hourly rates in excess of \$60/hour.
2. Overtime requests may only cover the period during which radio programming activities took place, in accordance with approved hours and payroll records.
3. Approved time periods for backfill reimbursement are as follows:
 - 10 hours if the approved activity was ≥ 4 hours and ≤ 10 hours.
 - 14 hours if the approved activity was > 10 hours and ≤ 14 hours.
 - 24 hours if the approved activity was > 14 hours and ≤ 24 hours.
4. During any single period of time, reimbursement may be provided either for overtime for the individual performing the programming, or backfill, but not both.
5. All time must be entered in military format with colons - Ex. 08:30.

Required Submissions for Reimbursement

1. Reimbursement Request Cover Sheet, signed by appropriate parties.
2. Backfill/Overtime Worksheet.
3. Payroll documentation for the individual(s) reimbursement is being requested for the entire pay period involved with the approved activity, showing as applicable regular as well as overtime/backfill hours worked and associated pay rates and gross wages.
4. Radio Programming Support Request associated with this reimbursement request, signed by appropriate parties.
5. Proof of Code Plug approval by a NERAC Interoperability Committee representative.

Questions? Email NERAC-BFOT@mapc.org. Form is available online at www.nerac.us.

All forms must be typed. Handwritten documents will not be accepted.



NERAC Radio Programming BF/OT Reimbursement Request
Cover Sheet

Submit all documentation to NERAC-BFOT@mapc.org

Activity Title, Location, Hours, and Date(s): <small>*If a COML/COMT completed programming work for multiple agencies, submit one BF/OT reimbursement request per Radio Programming Support Request.</small>	
Name of Municipality/District/Agency (as it should appear on check):	
Mailing Address for check:	
Contact Person's name, e-mail, and phone:	
Payroll Administrator's name, e-mail, and phone:	

TOTAL REIMBURSEMENT REQUESTED:	\$0.00
--------------------------------	--------

Required submissions for reimbursement:
1. This Reimbursement Request Cover Sheet, signed by appropriate parties. 2. Backfill/Overtime Worksheet. 3. Payroll system documentation. 4. Radio Programming Support Request associated with this reimbursement request, signed by appropriate parties. 5. Proof of Code Plug approval by a NERAC Interoperability Committee representative.

I certify that I am the department/district/agency official and/or Chief Financial Officer for the municipality/department/district/agency referenced above. I certify and attest to the truth and accuracy of the information provided on this form and hold harmless the region's fiduciary against error and/or fraud.

Printed Name	Title	Signature	Date

NERAC Radio Programming BF/OT Reimbursement Request Worksheet

OVERTIME REIMBURSEMENT REQUEST							
Name of COML/COMT Performing the Work <small>(Non-salaried personnel only)</small>	Rank/Title	Date	Overtime Hourly Rate	Start Time <small>(use military time with colon)</small>	End Time <small>(use military time with colon)</small>	Total Hours	Overtime Expense
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
						0.00	\$0.00
OT TOTAL:							\$0.00

BACKFILL REIMBURSEMENT REQUEST									
Name of COML/COMT Performing the Work <small>(Non-salaried personnel only)</small>	Rank/Title	Date	Name of Employee who backfilled <small>(Non-salaried personnel only)</small>	Rank/Title	Overtime Hourly Rate	Start Time <small>(use military time)</small>	End Time <small>(use military time)</small>	Total Hours	Overtime Expense
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
								0.00	\$0.00
							BF TOTAL		\$0.00

GRAND TOTAL: \$0.00

One line of the form should be used for each member on each calendar day.
If a single session of activity occurred across multiple days, it must be entered as two separate line items - Ex. 22:00-04:00 should be entered separately as 22:00-00:00 and 00:00-04:00.

Please note that BF/OT reimbursement rates are capped at a maximum of \$60/hr for this project.

All forms must be typed. No handwritten documents will be accepted.