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SEAMLESS STATEWIDE



PUBLIC SAFETY RADIO COMMUNICATIONS

State Plan for Mutual Aid Communications Frequencies

Annex K

Version 4.6

Issued: November 2011

Wisconsin Mutual Aid Communications Frequencies

This statewide plan for mutual aid communications outlines public safety mutual aid frequencies available in Wisconsin for on scene tactical radio communications. All public safety and governmental agencies are encouraged to implement these frequencies.

Updates

Changes included in Edition 4.4

As interoperability planning in Wisconsin evolves and matures, a number of changes have been implemented since the last edition of this plan.

- A portable tactical repeater channel, VTAC36, has been established by combining VTAC11 as the output and VTAC14 as the input.
- A Project 25 digital version of this channel, VTAC36DG, is also available. Law enforcement special operations, such as SWAT, may use encrypted communications on the VTAC##DG channels. These are Wisconsin only channels and not part of the national plan.
- National channel nomenclature has been established by the National Public Safety Telecommunications Council for nationwide interoperability channels. Several channel names have been changed in order to integrate with the national naming standards. WISPERN becomes VLAW31, VCALL becomes VCALL10, and VTAC1 through VTAC4 become VTAC11 through VTAC14.
- A sixteen channel “National Zone” has been established to include the primary nationwide VHF interoperability channels. Whenever possible, mobile and portable radios should include these channels for interoperability use when leaving Wisconsin, or working with agencies other states.
- The Network Access Code (NAC) on the digital VTAC channels (VTAC##DG) has been changed from 800 to 293 to comply with the national standard.
- Tone squelch on receive can now be optionally implemented on channels that had been carrier squelch receive, such as some of the Fireground channels.
- The State Interoperability Council has established policy for the narrowbanding of all statewide mutual aid/interoperability channels during the April to November 2011 timeframe. **ALL VHF AND UHF CHANNELS IN THIS DOCUMENT ARE NARROWBAND.** The changes listed above are to be implemented through the narrowband programming process.
- Agencies should consider to converting their communications systems to narrowband operation in that 2011 timeframe, prior to the December 31, 2012 deadline.

- The list of 700 MHz interoperability and low power frequencies are now included.

Changes included in Edition 4.5

- p. 8 corrected VCALL to VCALL10, p. 17 corrected 8CALL90 input 821.0125 to 806.

Changes included in Edition 4.6

- Consolidated list of changes to the front of the annex document.
- Page 7 for MARC 4: deleted "Use is restricted in the La Crosse area" and added: "Public/private interoperability"

Updates and Revisions

This document will be updated annually or as needed to reflect changes due to FCC rules, narrowbanding, frequency assignments, etc. Suggestions for changes to this document should be forwarded to the Mutual Aid Frequency Coordination Group Chairperson, see www.interop.wi.gov. Clarification and implementation questions on this plan may be directed to:

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MFCG

The Mutual Aid Frequency Coordination Group (MFCG) has been established as a committee of the State Interoperability Council to manage the statewide mutual aid/interoperability channel resources. See the Wisconsin Interoperability Initiative website at www.interop.wi.gov for more information on the MFCG and all aspects of public safety communications interoperability in Wisconsin.

Usage

All public safety agencies in Wisconsin are encouraged to implement the statewide common frequencies. In some cases there are local assignments that may conflict with the statewide use plan. It is highly desirable for these situations to be integrated into the state plan. The state frequency coordinator will work with those county and local agencies affected to address these situations. Counties and agencies with additional frequencies are encouraged to implement the statewide plan frequencies and making currently licensed simplex frequencies available for reassignment.

Be sure to identify your agency and unit when using common channels and to clear or signoff when done.

Law Enforcement

In general, each county will have a unique dispatch repeater channel. Some counties have an alternate dispatch channel.

Fire/Rescue/EMS

In general, each county will have a unique dispatch channel and a paging channel. Some counties may combine the functions of these channels. A pool of shared public safety on scene tactical channels has been established for fireground communications. Use of frequencies outlined in the state plan will increase the number of tactical channels available and provide for a high degree of interoperability between units at an incident.

Dispatch – a channel for communications between dispatch and field units, also unit to unit communications for longer range if through a repeater

Paging – a channel primarily for transmitting alerting messages to paging receivers

Local – a county specific channel for local administrative and training, usually a simplex frequency

Fireground – a channel for on scene tactical communications

Highway/Local Government

Each county is assigned a county highway department frequency (pair) and a local government frequency for road maintenance and other municipal operations.

Statewide Public Safety Common Mutual Aid Frequencies

These frequencies have been established for statewide public safety interagency and on scene communications and can be authorized for use under the state license.

MABAS

See the Mutual Aid Box Alarm System (MABAS) communications plan for more information at: www.mabasradio.org and www.mabaswisconsin.com.

Name	Interagency Fire Emergency Radio Network
Acronym	IFERN
Receive Frequency	154.265
Receive Tone	210.7
Transmit Frequency	154.265
Transmit Tone	210.7
Primary Discipline	Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign	KO2099
Usage	Mutual aid base/mobile dispatch

Name	Fireground Red
Acronym	FG RED
Receive Frequency	153.830
Receive Tone	69.3
Transmit Frequency	153.830
Transmit Tone	69.3
Primary Discipline	Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign	KO2099
Usage	Fireground operations, on scene tactical

Name	Fireground White
Acronym	FG WHITE
Receive Frequency	154.280
Receive Tone	74.4
Transmit Frequency	154.280
Transmit Tone	74.4
Primary Discipline	Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign	KO2099
Usage	Fireground operations, on scene tactical

Name	Fireground Blue
Acronym	FG BLUE
Receive Frequency	154.295
Receive Tone	85.4
Transmit Frequency	154.295
Transmit Tone	85.4
Primary Discipline	Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign	KO2099
Usage	Fireground operations, on scene tactical

MABAS

Name Fireground Gold
Acronym **FG GOLD**
Receive Frequency 153.8375
Receive Tone 91.5
Transmit Frequency 153.8375
Transmit Tone 91.5
Primary Discipline Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign KO2099
Usage Fireground operations, on scene tactical
Do not use at the same incident as Fireground Red and MARC1.

Name Fireground Black
Acronym **FG BLACK**
Receive Frequency 154.2725
Receive Tone 94.8
Transmit Frequency 154.2725
Transmit Tone 94.8
Primary Discipline Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign KO2099
Usage Fireground operations, on scene tactical
Do not use at the same incident as IFERN and Fireground White.

Name Fireground Gray
Acronym **FG GRAY**
Receive Frequency 154.2875
Receive Tone 136.5
Transmit Frequency 154.2875
Transmit Tone 136.5
Primary Discipline Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign KO2099
Usage Fireground operations, on scene tactical
Do not use at the same incident as Fireground White and Blue.

Name Interagency Fire Emergency Radio Network 2
Acronym **IFERN2**
Receive Frequency 154.3025
Receive Tone 67.0
Transmit Frequency 154.3025
Transmit Tone 67.0
Primary Discipline Fire/Rescue/EMS, Mutual Aid Box Alarm System
State Callsign KO2099
Usage Alternate mutual aid base/mobile dispatch
Do not use at the same incident as Fireground Blue and 154.310.

Mutual Aid Radio Channels

Name Mutual Aid Radio Channel 1
Acronym **MARC1**
Receive Frequency 151.280
Receive Tone 136.5
Transmit Frequency 153.845
Transmit Tone 136.5
Primary Discipline All public safety
State Callsign WNPG812
Usage Wide area interagency communications through repeaters

Name Mutual Aid Radio Channel 2
Acronym **MARC2**
Receive Frequency 151.280
Receive Tone 136.5
Transmit Frequency 151.280
Transmit Tone 136.5
Primary Discipline All public safety
State Callsign WNPG812
Usage On scene tactical incident communications
Medical helicopter landing zone coordination

Name Mutual Aid Radio Channel 3
Acronym **MARC3**
Receive Frequency 154.010
Receive Tone 71.9
Transmit Frequency 154.010
Transmit Tone 71.9
Primary Discipline Fire/Rescue/EMS, alternate for other public safety
State Callsign KO2099
Usage Fireground operations, on scene tactical
Use is restricted in the Marinette County area.

Name Mutual Aid Radio Channel 4
Acronym **MARC4**
Receive Frequency 154.130
Receive Tone 82.5
Transmit Frequency 154.130
Transmit Tone 82.5
Primary Discipline Fire/Rescue/EMS, alternate for other public safety
State Callsign KO2099
Usage Fireground operations, on scene tactical
Use also for Public/private interoperability

EMS

See the State EMS Communications plan for more info:

http://dhs.wisconsin.gov/ems/EMSsection/EMS_Reports.htm#COMMUNICATIONS

Name	State EMS Advanced (ALS)
Acronym	EMS A
Receive Frequency	155.400
Receive Tone	None
Transmit Frequency	155.400
Transmit Tone	D156 for statewide; each hospital is assigned a tone
Primary Discipline	EMS only
State Callsign	KH4762
Usage	ALS ambulance to hospital and ambulance to ALS intercept communications

Name	State EMS Basic (BLS)
Acronym	EMS B
Receive Frequency	155.340
Receive Tone	None
Transmit Frequency	155.340
Transmit Tone	D156 for statewide; each hospital is assigned a tone
Primary Discipline	EMS
State Callsign	KH4762
Usage	Ambulance to hospital communications

Name	State EMS Coordination
Acronym	EMS C
Receive Frequency	155.280
Receive Tone	D156 for statewide/mobile; each hospital is assigned a tone
Transmit Frequency	155.280
Transmit Tone	D156 for statewide/mobile; each hospital is assigned a tone
Primary Discipline	EMS, Public Health
State Callsign	KH4762
Usage	Hospital to hospital communications, on scene coordination, Alternate for medical helicopter landing zone coordination Use may be limited in some areas due to non-EMS users.

POINT / WEM CAR

Name	Point to Point
Acronym	POINT
Receive Frequency	155.370
Receive Tone	Optionally 146.2
Transmit Frequency	155.370
Transmit Tone	146.2
Primary Discipline	Law Enforcement
	Use by other disciplines only if directed by law enforcement
State Callsign	KA6570
Usage	Base to base interagency communications

Name	Wisconsin Emergency Management Car to Car
Acronym	WEM CAR
Receive Frequency	156.000
Receive Tone	136.5
Transmit Frequency	156.000
Transmit Tone	136.5
Primary Discipline	Emergency Management
State Callsign	KGT483
Usage	On scene tactical incident communications

NATIONAL VHF

Name	VLAW31
	Formerly Wisconsin Police Emergency Radio Network
Acronym	VLAW31
Receive Frequency	155.475
Receive Tone	Optionally 156.7
Transmit Frequency	155.475
Transmit Tone	156.7
Primary Discipline	Law Enforcement
	Use by other disciplines only if directed by law enforcement
State Callsign	KA6570
Usage	Interagency communications

Name	VHF Calling
Acronym	VCALL10
Receive Frequency	155.7525
Receive Tone	156.7
Transmit Frequency	155.7525
Transmit Tone	156.7
Primary Discipline	All public safety, nationwide
State Callsign	N/A
Usage	Public safety interagency calling channel, nationwide

NATIONAL VHF

Name VHF Tactical 11
Acronym **VTAC11**
Receive Frequency 151.1375
Receive Tone 156.7
Transmit Frequency 151.1375
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications

Name VHF Tactical 12
Acronym **VTAC12**
Receive Frequency 154.4525
Receive Tone 156.7
Transmit Frequency 154.4525
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications

Name VHF Tactical 13
Acronym **VTAC13**
Receive Frequency 158.7375
Receive Tone 156.7
Transmit Frequency 158.7375
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications

Name VHF Tactical 14
Acronym **VTAC14**
Receive Frequency 159.4725
Receive Tone 156.7
Transmit Frequency 159.4725
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications

NATIONAL VHF

Name VHF Tactical 11 Digital
Acronym **VTAC11DG**
Receive Frequency 151.1375
Receive Tone 156.7 and NAC 293
Transmit Frequency 151.1375
Transmit Tone NAC 293
Primary Discipline All public safety
State Callsign N/A
Usage Public safety interagency tactical communications

Name VHF Tactical 12 Digital
Acronym **VTAC12DG**
Receive Frequency 154.4525
Receive Tone 156.7 and NAC 293
Transmit Frequency 154.4525
Transmit Tone NAC 293
Primary Discipline All public safety
State Callsign N/A
Usage Public safety interagency tactical communications

Name VHF Tactical 13 Digital
Acronym **VTAC13DG**
Receive Frequency 158.7375
Receive Tone 156.7 and NAC 293
Transmit Frequency 158.7375
Transmit Tone NAC 293
Primary Discipline All public safety
State Callsign N/A
Usage Public safety interagency tactical communications

Name VHF Tactical 14 Digital
Acronym **VTAC14DG**
Receive Frequency 159.4725
Receive Tone 156.7 and NAC 293
Transmit Frequency 159.4725
Transmit Tone NAC 293
Primary Discipline All public safety
State Callsign N/A
Usage Public safety interagency tactical communications

NATIONAL VHF

Name	VHF Tactical 36
Acronym	VTAC36
Receive Frequency	151.1375
Receive Tone	156.7
Transmit Frequency	159.4725
Transmit Tone	136.5
Primary Discipline	All public safety, nationwide
State Callsign	KO2099
Usage	Public safety interagency tactical communications repeater

Name	VHF Tactical 36 Digital
Acronym	VTAC36DG
Receive Frequency	151.1375
Receive Tone	156.7 and NAC 293
Transmit Frequency	159.4725
Transmit Tone	NAC 293
Primary Discipline	All public safety
State Callsign	KO2099
Usage	Public safety interagency tactical communications repeater

Name	National Search & Rescue
Acronym	NATSAR
Receive Frequency	155.160
Receive Tone	Optionally 127.3
Transmit Frequency	155.160
Transmit Tone	127.3
Primary Discipline	Search and Rescue
State Callsign	KO2099
Usage	Interface between public safety agencies and search and rescue groups Use may be limited in some areas due to non-EMS users.

See the state plan for more info (available at www.interop.wi.gov).

UHF

Name UHF Calling
Acronym **UCALL40**
Receive Frequency 453.2125
Receive Tone 156.7
Transmit Frequency 458.2125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency calling channel (repeater)

Name UHF Calling Direct
Acronym **UCALL40D**
Receive Frequency 453.2125
Receive Tone 156.7
Transmit Frequency 453.2125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency calling channel (direct)

Name UHF Tactical 41
Acronym **UTAC41**
Receive Frequency 453.4625
Receive Tone 156.7
Transmit Frequency 458.4625
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (repeater)

Name UHF Tactical 41 Direct
Acronym **UTAC41D**
Receive Frequency 453.4625
Receive Tone 156.7
Transmit Frequency 453.4625
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (direct)

UHF

Name	UHF Tactical 42
Acronym	UTAC42
Receive Frequency	453.7125
Receive Tone	156.7
Transmit Frequency	458.7125
Transmit Tone	156.7
Primary Discipline	All public safety, nationwide
State Callsign	N/A
Usage	Public safety interagency tactical communications (repeater)

Name	UHF Tactical 42 Direct
Acronym	UTAC42D
Receive Frequency	453.7125
Receive Tone	156.7
Transmit Frequency	453.7125
Transmit Tone	156.7
Primary Discipline	All public safety, nationwide
State Callsign	N/A
Usage	Public safety interagency tactical communications (direct)

Name	UHF Tactical 43
Acronym	UTAC43
Receive Frequency	453.8625
Receive Tone	156.7
Transmit Frequency	458.8625
Transmit Tone	156.7
Primary Discipline	All public safety, nationwide
State Callsign	N/A
Usage	Public safety interagency tactical communications (repeater)

Name	UHF Tactical 43 Direct
Acronym	UTAC43D
Receive Frequency	453.8625
Receive Tone	156.7
Transmit Frequency	453.8625
Transmit Tone	156.7
Primary Discipline	All public safety, nationwide
State Callsign	N/A
Usage	Public safety interagency tactical communications (direct)

700 MHz

Interoperability frequencies in the public safety 700 MHz band are subject to planning by the State Interoperability Council and Mutual Aid Frequency Coordinating Group. At present, more information is available at the CAPRAD web site: www.caprad.org.

700 MHz

Receive Frequency	RX NAC	Transmit Frequency	TX NAC	Label	Description	Use/Notes
769.14375	F7E	799.14375	293	7TAC51	General Public Safety Services (secondary trunked)	
769.64375	F7E	799.64375	293	7TAC52	General Public Safety Services (secondary trunked)	
770.14375	F7E	800.14375	293	7TAC53	General Public Safety Services (secondary trunked)	
770.64375	F7E	800.64375	293	7TAC54	General Public Safety Services (secondary trunked)	
769.24375	F7E	799.24375	293	7CALL50	Calling Channel	Mandatory ¹
769.74375	F7E	799.74375	293	7TAC55	General Public Safety Service	Mandatory ¹
770.24375	F7E	800.24375	293	7TAC56	General Public Safety Service	Mandatory ¹
770.74375	F7E	800.74375	293	7DATA69	Mobile Data	
769.39375	F7E	799.39375	293	7MED65	Emergency Medical Service	Mandatory ¹
769.89375	F7E	799.89375	293	7FIRE63	Fire Service	Mandatory ¹
770.39375	F7E	800.39375	293	7LAW61	Law Enforcement Service	Mandatory ¹
770.89375	F7E	800.89375	293	7MOB59	Mobile Repeater	Mandatory ¹
769.49375	F7E	799.49375	293	7MED66	Emergency Medical Service	Mandatory ¹
769.99375	F7E	799.99375	293	7FIRE64	Fire Service	Mandatory ¹
770.49375	F7E	800.49375	293	7LAW62	Law Enforcement Service	Mandatory ¹
770.99375	F7E	800.99375	293	7GTAC57	Other Public Service	Mandatory ¹
773.10625	F7E	803.10625	293	7TAC71	General Public Safety Services (secondary trunked)	
773.60625	F7E	803.60625	293	7TAC72	General Public Safety Services (secondary trunked)	
774.10625	F7E	804.10625	293	7TAC73	General Public Safety Services (secondary trunked)	
774.60625	F7E	804.60625	293	7TAC74	General Public Safety Services (secondary trunked)	
773.25625	F7E	803.25625	293	7CALL70	Calling Channel	Mandatory ¹
773.75625	F7E	803.75625	293	7TAC75	General Public Safety Service	Optional ²
774.25625	F7E	804.25625	293	7TAC76	General Public Safety Service	Optional ²
774.75625	F7E	804.75625	293	7DATA89	Mobile Data	
773.00625	F7E	803.00625	293	7MED86	Emergency Medical Service	Optional ²
773.50625	F7E	803.50625	293	7FIRE83	Fire Service	Optional ²
774.00625	F7E	804.00625	293	7LAW81	Law Enforcement Service	Optional ²
774.50625	F7E	804.50625	293	7MOB79	Mobile Repeater	
773.35625	F7E	803.35625	293	7MED87	Emergency Medical Service	Optional ²
773.85625	F7E	803.85625	293	7FIRE84	Fire Service	Optional ²
774.35625	F7E	804.35625	293	7LAW82	Law Enforcement Service	Optional ²
774.85625	F7E	804.85625	293	7GTAC77	Other Public Services	Optional ²

Channels labeled as Mandatory and Optional include both the mobile transmit and mobile receive (a total of 21 channels) for subscriber units only. Mandatory¹ are required for all 700MHz licensees. Optional² are recommended additional Interop channels for radios that have additional channel capacity. Simplex channel names should carry the “D” (for Direct) suffix as used in the national interoperability channel naming convention.

700 MHz

LIST OF 700 MHz NARROWBAND LOW POWER FREQUENCIES Pursuant to 2nd Report & Order Adapted from the Region 54 700 MHz Plan

In the Third Report & Order in Docket 96-86, the FCC allocated twenty-four 6.25 kHz frequency pairs for low power, on-site operations such as fireground. Analog primary operations are permitted on these frequencies. When allocating for analog use, 12.5 kHz bandwidth would be required. Operation on these frequencies is limited to 2 watts ERP and antenna height is limited to 20' above ground.

Six (three 12.5 kHz) of these frequency pairs are for nationwide itinerant use and are not subject to Regional Planning. The remaining 18 (nine 12.5 kHz) low power frequency pairs are to be administered by the 700 MHz Regional Planning Committees.

Interest has arisen from Region 54 fire service representatives to establish common channel naming and tone squelch for these channels in order to accommodate common usage on the fireground and other tactical situations. Analog 12.5 kHz operation with a common tone squelch of 156.7 Hz is used on all frequencies.

Each channel has been given a discipline indicator to allow users some channels to focus on, however, all nine channels would be available for assignment as needed. Within each discipline group, frequency separation has been provided in order to reduce interference.

7FTAC1	700 Fire Tactical
7FTAC2	700 Fire Tactical
7FTAC3	700 Fire Tactical
7GTAC4	700 General Govt Tactical
7GTAC5	700 General Govt Tactical
7LTAC6	700 Law Tactical
7LTAC7	700 Law Tactical
7LTAC8	700 Law Tactical
7MTAC9	700 Medical Tactical
7NTAC10	700 National Tactical/Itinerant
7NTAC11	700 National Tactical/Itinerant
7NTAC12	700 National Tactical/Itinerant

FCC Channels	Receive Frequency	RX Tone	Transmit Frequency	TX Tone	Name
1-2	769.006250	156.7	799.006250	156.7	7FTAC1
3-4	769.018750	156.7	799.018750	156.7	7LTAC6
5-6	769.031250	156.7	799.031250	156.7	7GTAC4
7-8	769.043750	156.7	799.043750	156.7	7FTAC3
9-10	769.056250	156.7	799.056250	156.7	7NTAC10
11-12	769.068750	156.7	799.068750	156.7	7NTAC11
949-950	774.931250	156.7	804.931250	156.7	7FTAC2
951-952	774.943750	156.7	804.943750	156.7	7LTAC7
953-954	774.956250	156.7	804.956250	156.7	7GTAC5
955-956	774.968750	156.7	804.968750	156.7	7MTAC9
957-958	774.981250	156.7	804.981250	156.7	7LTAC8
959-960	774.993750	156.7	804.993750	156.7	7NTAC12

800 MHz

Name 800 Tactical Red
Acronym **8TACRED**
Receive Frequency 851.450
Receive Tone 156.7
Transmit Frequency 851.450
Transmit Tone 156.7
Primary Discipline All public safety (fire first choice)
State Callsign WQJX638
Usage On scene tactical incident communications

Name 800 Tactical White
Acronym **8TACWHITE**
Receive Frequency 851.950
Receive Tone 156.7
Transmit Frequency 851.950
Transmit Tone 156.7
Primary Discipline All public safety (fire first choice)
State Callsign WQJX638
Usage On scene tactical incident communications

Name 800 Tactical Blue
Acronym **8TACBLUE**
Receive Frequency 852.450
Receive Tone 156.7
Transmit Frequency 852.450
Transmit Tone 156.7
Primary Discipline All public safety (fire first choice)
State Callsign WQJX638
Usage On scene tactical incident communications

Name 800 Tactical Gold
Acronym **8TACGOLD**
Receive Frequency 852.950
Receive Tone 156.7
Transmit Frequency 852.950
Transmit Tone 156.7
Primary Discipline All public safety (law first choice)
State Callsign WQJX638
Usage On scene tactical incident communications

800 MHz

Name 800 Tactical Black
Acronym **8TACBLACK**
Receive Frequency 853.450
Receive Tone 156.7
Transmit Frequency 853.450
Transmit Tone 156.7
Primary Discipline All public safety (law first choice)
State Callsign WQJX638
Usage On scene tactical incident communications

Name 800 Tactical Gray
Acronym **8TACGRAY**
Receive Frequency 853.950
Receive Tone 156.7
Transmit Frequency 853.950
Transmit Tone 156.7
Primary Discipline All public safety (law first choice)
State Callsign WQJX638
Usage On scene tactical incident communications

Name 800 Calling
Acronym **8CALL90**
Receive Frequency 851.0125
Receive Tone 156.7
Transmit Frequency 806.0125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency calling channel (repeater)

Name 800 Calling Direct
Acronym **8CALL90D**
Receive Frequency 851.0125
Receive Tone 156.7
Transmit Frequency 851.0125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency calling channel (direct)

800 MHz

Name 800 Tactical 1
Acronym **8TAC91**
Receive Frequency 851.5125
Receive Tone 156.7
Transmit Frequency 806.5125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (repeater)

Name 800 Tactical 1 Direct
Acronym **8TAC91D**
Receive Frequency 851.5125
Receive Tone 156.7
Transmit Frequency 851.5125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (direct)

Name 800 Tactical 2
Acronym **8TAC92**
Receive Frequency 852.0125
Receive Tone 156.7
Transmit Frequency 807.0125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (repeater)

Name 800 Tactical 2 Direct
Acronym **8TAC92D**
Receive Frequency 852.0125
Receive Tone 156.7
Transmit Frequency 852.0125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (direct)

800 MHz

Name 800 Tactical 3
Acronym **8TAC93**
Receive Frequency 852.5125
Receive Tone 156.7
Transmit Frequency 807.5125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (repeater)

Name 800 Tactical 3 Direct
Acronym **8TAC93D**
Receive Frequency 852.5125
Receive Tone 156.7
Transmit Frequency 852.5125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (direct)

Name 800 Tactical 4
Acronym **8TAC94**
Receive Frequency 853.0125
Receive Tone 156.7
Transmit Frequency 808.0125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (repeater)

Name 800 Tactical 4 Direct
Acronym **8TAC94D**
Receive Frequency 853.0125
Receive Tone 156.7
Transmit Frequency 853.0125
Transmit Tone 156.7
Primary Discipline All public safety, nationwide
State Callsign N/A
Usage Public safety interagency tactical communications (direct)

See the NPSPAC Region 45 and 54 plans for more info; they are available at www.caprad.org. The transmit and receive references listed above are for mobile and portable operation, not for base stations.

Frequency Use Authorization

All users must either hold their own license or be authorized by letter to operate under another qualified licensee's license in order to legally transmit on a frequency. In many cases, local agencies can receive their authorization from the county. To receive authorization to operate under a statewide license, complete and submit the Frequency Authorization Request form. Generally, only mobile and portable radios can be authorized to operate under someone else's license; base stations must be licensed for a specific location.

STATE FREQUENCY AUTHORIZATION REQUEST

This is a request to operate mobile and/or portable radios under a state license.

Agency: _____

Address: _____

Phone: _____

Fax: _____

Contact: _____

Email: _____

Channels/Frequencies Requested:

No. of radios: _____

Purpose/usage/other info:

Submit request by email, fax, or mail to:

Carl Guse
Frequency Coordinator
Wisconsin State Patrol
POB 7912
Madison WI 53707-7912

608-266-2497
608-267-4495 fax
carl.guse@dot.wi.gov

For internal use: Approved on _____ by _____

WISCONSIN STATEWIDE PUBLIC SAFETY COMMON FREQUENCY CHART

VHF Band

Mobile Receive Frequency	RX Tone	Mobile Transmit Frequency	TX Tone	State Name	National Name	State Callsign	Primary Use
155.4750	CS	155.4750	156.7	VLOW31	VLOW31	KA6570	Law Enforcement
155.3700	CS	155.3700	146.2	POINT	None	KA6570	Law Enforcement
151.2800	136.5	153.8450	136.5	MARC1	None	WNPG812	All Public Safety
151.2800	136.5	151.2800	136.5	MARC2	None	WNPG812	All Public Safety
154.0100	71.9	154.0100	71.9	MARC3	None	KO2099	All Public Safety
154.1300	82.5	154.1300	82.5	MARC4	None	KO2099	All Public Safety
156.0000	136.5	156.0000	136.5	WEM CAR	None	KGT483	Emergency Mgt.
155.3400	CS	155.3400	D156	EMS B	None	KH4762	EMS
155.2800	D156	155.2800	D156	EMS C	None	KH4762	EMS
155.4000	CS	155.4000	D156	EMS A	None	KH4762	EMS
154.2650	210.7	154.2650	210.7	IFERN	None	KO2099	Fire
153.8300	69.3	153.8300	69.3	FG RED	None	KO2099	Fire
154.2800	74.4	154.2800	74.4	FG WHITE	None	KO2099	Fire
154.2950	85.4	154.2950	85.4	FG BLUE	None	KO2099	Fire
153.8375	91.5	153.8375	91.5	FG GOLD	None	KO2099	Fire
154.2725	94.8	154.2725	94.8	FG BLACK	None	KO2099	Fire
154.2875	136.5	154.2875	136.5	FG GRAY	None	KO2099	Fire
154.3025	67.0	154.3025	67.0	IFERN2	None	KO2099	Fire
155.1600	127.3	155.1600	127.3	NATSAR	SAR	KO2099	Search & Rescue
155.7525	156.7	155.7525	156.7	VCALL10	VCALL10	KO2099	All Public Safety
151.1375	156.7	151.1375	156.7	VTAC11	VTAC11	KO2099	All Public Safety
154.4525	156.7	154.4525	156.7	VTAC12	VTAC12	KO2099	All Public Safety
158.7375	156.7	158.7375	156.7	VTAC13	VTAC13	KO2099	All Public Safety
159.4725	156.7	159.4725	156.7	VTAC14	VTAC14	KO2099	All Public Safety
151.1375**	N293*	151.1375	N293	VTAC11DG	None	KO2099	All Public Safety
154.4525**	N293*	154.4525	N293	VTAC12DG	None	KO2099	All Public Safety
158.7375**	N293*	158.7375	N293	VTAC13DG	None	KO2099	All Public Safety
159.4725**	N293*	159.4725	N293	VTAC14DG	None	KO2099	All Public Safety
151.1375**	156.7	159.4725	136.5	VTAC36	None	KO2099	All Public Safety
151.1375**	N293*	159.4725	N293	VTAC36DG	None	KO2099	All Public Safety

All channels are narrowband. * = Mixed Mode Receive N = P25 NAC **These channels are *not* required in new grant-funded radios.

NATIONAL ZONE PUBLIC SAFETY COMMON FREQUENCY CHART

VHF Band

Mobile Receive Frequency	RX Tone	Mobile Transmit Frequency	TX Tone	National Name	State Callsign	Primary Use
155.7525	156.7	155.7525	156.7	VCALL10	KO2099	National Calling
151.1375	156.7	151.1375	156.7	VTAC11	KO2099	National Tactical
154.4525	156.7	154.4525	156.7	VTAC12	KO2099	National Tactical
158.7375	156.7	158.7375	156.7	VTAC13	KO2099	National Tactical
159.4725	156.7	159.4725	156.7	VTAC14	KO2099	National Tactical
154.280	CS	154.280	156.7	VFIRE21	KO2099	Fire
154.265	CS	154.265	156.7	VFIRE22	KO2099	Fire
154.295	CS	154.295	156.7	VFIRE23	KO2099	Fire
154.2725	CS	154.2725	156.7	VFIRE24	KO2099	Fire
154.2875	CS	154.2875	156.7	VFIRE25	KO2099	Fire
154.3025	CS	154.3025	156.7	VFIRE26	KO2099	Fire
155.340	CS	155.340	156.7	VMED28	KH4762	EMS to Hospital
155.3475	CS	155.3475	156.7	VMED29	KH4762	EMS Portables**
155.475	CS	155.475	156.7	VLAW31	KA6570	Law Enforcement
155.4825	CS	155.4825	156.7	VLAW32	KA6570	Law Portables**
155.160	CS	155.160	127.3	SAR	KO2099	Search & Rescue

All channels are narrowband.

** 6 watts maximum

800 MHz National Mutual Aid

Mobile Receive Frequency	RX Tone	Mobile Transmit Frequency	TX Tone	Name	National Name	Primary Use
851.0125	156.7	806.0125	156.7	8CALL90	8CALL90	All Public Safety
851.5125	156.7	806.5125	156.7	8TAC91	8TAC91	All Public Safety
852.0125	156.7	807.0125	156.7	8TAC92	8TAC92	All Public Safety
852.5125	156.7	807.5125	156.7	8TAC93	8TAC93	All Public Safety
853.0125	156.7	808.0125	156.7	8TAC94	8TAC94	All Public Safety
851.0125	156.7	851.0125	156.7	8CALL90D	8CALL90D	All Public Safety
851.5125	156.7	851.5125	156.7	8TAC91D	8TAC91D	All Public Safety
852.0125	156.7	852.0125	156.7	8TAC92D	8TAC92D	All Public Safety
852.5125	156.7	852.5125	156.7	8TAC93D	8TAC93D	All Public Safety
853.0125	156.7	853.0125	156.7	8TAC94D	8TAC94D	All Public Safety

Statewide 800 MHz Mutual Aid Channels

Statewide 800 MHz mutual aid / interoperability / tactical channels (“8TACs”) have been licensed by the FCC under callsign WQJX638. All Wisconsin public safety agencies with 800 MHz radios are encouraged to include these channels. These are the “rebanded” frequencies and they will not be further changed during rebanding processes. As with the VHF mutual aid frequencies, these channels are authorized under the statewide license by letter from the State Patrol Bureau of Public Security and Communications frequency coordinator.

800 MHz Statewide Mutual Aid

Mobile Receive Frequency	RX Tone	Mobile Transmit Frequency	TX Tone	Name	National Name	Primary Use
851.450	156.7	851.450	156.7	8TACRED	None	Fire/EMS
851.950	156.7	851.950	156.7	8TACWHITE	None	Fire/EMS
852.450	156.7	852.450	156.7	8TACBLUE	None	Fire/EMS
852.950	156.7	852.950	156.7	8TACGOLD	None	Law/DPW
853.450	156.7	853.450	156.7	8TACBLACK	None	Law/DPW
853.950	156.7	853.950	156.7	8TACGRAY	None	Law/DPW

Priority Order for Implementation of VHF Channels

The chart below provides a general guide for the priority of implementation of channels in radios that do not have sufficient capacity to include all statewide interoperability channels. In radios that have 16 channel zones, it is generally suggested that the most used channels be included in the 1st zone, other Priority 1 through 12 channels be included in the 2nd zone and Priority 13 through 24 channels be included in the 3rd zone. This list makes no further suggestion regarding the order in which channels should be placed within radios.

PRIORITY	LAW ENFORCEMENT	FIRE	EMS	EMERGENCY MGT	DPW/HWY
1	VLAW31	FG BLUE	EMS B	WEM CAR	WEM CAR
2	MARC1	MARC1	MARC1	MARC1	MARC1
3	MARC2	MARC2	MARC2	MARC2	MARC2
4	MARC3	MARC3	MARC3	MARC3	MARC3
5	MARC4	MARC4	MARC4	MARC4	MARC4
6	POINT	IFERN	IFERN	IFERN	IFERN
7	WEM CAR	FG RED	FG RED	FG RED	FG RED
8	FG BLUE	FG WHITE	FG WHITE	FG WHITE	FG WHITE
9	IFERN	WEM CAR	FG BLUE	FG BLUE	FG BLUE
10	EMS C	EMS C	EMS C	EMS C	EMS C
11	FG RED	VLAW31	VLAW31	VLAW31	VLAW31
12	FG WHITE	POINT	POINT	POINT	POINT
13	NATSAR	NATSAR	NATSAR	NATSAR	NATSAR
14	EMS B	EMS B	WEM CAR	EMS B	EMS B
15	EMS A	EMS A	EMS A	EMS A	EMS A
16	FG GOLD	FG GOLD	FG GOLD	FG GOLD	FG GOLD
17	FG BLACK	FG BLACK	FG BLACK	FG BLACK	FG BLACK
18	FG GRAY	FG GRAY	FG GRAY	FG GRAY	FG GRAY
19	IFERN2	IFERN2	IFERN2	IFERN2	IFERN2
20	VCALL10	VCALL10	VCALL10	VCALL10	VCALL10
21	VTAC11	VTAC11	VTAC11	VTAC11	VTAC11
22	VTAC12	VTAC12	VTAC12	VTAC12	VTAC12
23	VTAC13	VTAC13	VTAC13	VTAC13	VTAC13
24	VTAC14	VTAC14	VTAC14	VTAC14	VTAC14