



State Plan for Mutual Aid Communications Frequencies

Annex K
Version 4.4

Issued: February 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 in this Edition

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.

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 is restricted in the La Crosse County area.

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 | VCALL |
| 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 821.0125
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.

Updates and Revisions

This document will be updated annually or as needed to reflect changes due to FCC rules, narrowbanding, frequency assignments, etc. Revision 4.4 prepared March 2011 by:

Carl Guse
State Frequency Coordinator
Wisconsin State Patrol
POB 7912
Madison WI 53707-7912
608-266-2497 office
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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 |