

# NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels

### Revised June 2009

This document outlines the NCC / NPSTC Standard Channel Nomenclature for Public Safety Interoperability Channels as revised in June of 2009. The requirement for a common naming protocol for public safety's interoperability frequencies was identified in early 2000 by the Public Safety National Coordination Committee (NCC), a Federal Advisory Committee chartered by the Federal Communications Commission (FCC) that operated from 1999 to 2003, and provided recommendations to the Commission on operational and technical parameters for use of the 700 MHz public safety band.

# **Document History**

In the final report of the NCC on July 25, 2003, Chair Kathleen Wallmann wrote:

### Standard Channel Nomenclature

The NCC respectfully renews its earlier recommendation that the Commission's Rules contain mandatory channel nomenclature for all interoperability channels on all public safety bands. The NCC views such standard nomenclature as essential to the interoperability process, such that all responders to an incident will know the appropriate channel to which to tune their radios and will know – from the channel designator – the band and primary use of the channel specified. Absent such standard nomenclature, a Babel-like confusion could result if, for example, a given jurisdiction were to designate 458.2125 MHz as a calling channel and associate it with "Channel 5" on its radios; and another jurisdiction were to designate the same frequency as a tactical channel and assign it to "Channel 9" on its radios. With adoption of a standard channel nomenclature in the Rules, such confusion – and the attendant potential for delayed response to an incident – would be avoided...

While the FCC declined at that time to mandate such a standard channel nomenclature, the NCC protocol has received wide acceptance within the public safety communications community, as communications interoperability for public safety's first responders continues to be a major issue.

During 2006 NPSTC was approached by a number of public safety user organizations with a request that NPSTC review and update the *Standard Channel Nomenclature* to reflect 'real world' user operational requirements. A Task Group was convened and a public forum to address the issue was held on February 5, 2007 in Orlando FL. Six proponent organizations submitted recommendations for modification of the *Standard Channel Nomenclature*. These were heard and discussed at the forum, and a consensus format was adopted. The proposed

American Association of State Highway and Transportation Officials | American Radio Relay League | Association of Fish and Wildlife Agencies | Association of Public Safety Communications Officials | Forestry Conservation Communications Association | International Association of Chiefs of Police | International Association of Emergency Managers | International Association of Fire Chiefs | International Municipal Signal Association | National Association of State Chief Information Officers | National Association of State Emergency Medical Services Officials | National Association of State Foresters | National Association of State Technology Directors | National Emergency Number Association | National Sheriffs' Association

revision (as a *Report of Committee*) was placed on public notice, and after a 90 day comment period, adopted as the revised NCC / NPSTC Standard Channel Nomenclature protocol.

## **NTIA Interoperability Channels**

During the 2007 Forum the issue of names for the 40 NTIA VHF and UHF Interoperability Channels was discussed. The NTIA had designated these channels with a set of names in a format that does not prevent duplication of identifiers or promote uniqueness. The channels were made available for licensing by state and local entities through a process outlined in FCC Public Notice DA-1621, released July 13, 2001<sup>1</sup> Since 2001, at least one federal agency had developed guidance for these channels with a different set of channel names. The representatives of the various federal agencies present at the 2007 Forum requested that the Task Group take the issue of the NTIA channel naming off line, and work with them to find a solution that works for all parties.

The Interdepartment Radio Advisory Committee (IRAC) AD HOC 214 group addressed the issue, obtained naming consensus within the Federal public safety community, and has reported out that the existing naming convention will remain as-is due to the large number of existing federal subscriber sets in use. The AD HOC 214 co-conveners have agreed to request that the FCC update the information contained in DA-1621 and issue a new Public Notice.

This revision of the Standard Channel Nomenclature includes the 40 NTIA VHF and UHF Interoperability Channels with the NTIA naming format and Tone Squelch / Network Access information. NPSTC recommends to state and local public safety agencies who may program these channels into subscriber radio equipment that these channels be placed into a separate bank named "Fed" or "NTIA" as a method of avoiding user confusion with any similarly named local operating frequencies.

## 700 MHz Spectrum

During NPSTC's 2007 Comment Period for the Report of Committee, the FCC released Docket 07-72, a Report and Order and Further Notice of Proposed Rulemaking addressing seven different dockets relating to the Lower and Upper 700 MHz Bands (including the public safety segments in TV Channels 63, 64, 68, and 69). Among the numerous issues in this docket, the Commission announced intent to realign the Public Safety allocations to combine the two separate segments of paired narrowband channels<sup>2</sup> into the Channel 64/69 pair, and combine the non-narrowband voice use into Channel 63/68, and reallocate the use to Broadband Data which could reduce or eliminate the designators for Wideband Data interoperability channels. The original FCC allocations for the narrowband Interoperability spectrum included duplicate sets of channels (e.g.: Call. Data I/O. Secondary Trunking, etc.), that are reflected in the current protocol. At the time, NPSTC elected to refrain from making any adjustments to the protocol until such time as the issues raised in the Further Notice were resolved by the FCC.

The Second Report and Order (FCC 07-132), released August 12, 2007, consolidated the two separate narrowband voice blocks into one segment of the 700 MHz band, but did not address the issue of duplicate calling and data interoperability channels. Subsequent to the release of the Second Report and Order NPSTC has filed a Request for Rulemaking asking the FCC in part to address the duplicate Calling and Data Interoperability channel designation.

<sup>1</sup> See FCC DA-01-1621A for the original names and limitations.

<sup>2</sup> At the time, each 6 MHz TV channel was allocated as 3 MHz of narrowband voice, and 3 MHz of reserve or wideband data use. Channel 63 was paired with Channel 68, and Channel 64 was paired with Channel 69

This revision of the Standard Channel Nomenclature consolidates the former split blocks of channels and changes the frequency information from the FCC Channel Number format in the NCC and previous NPSTC versions to the discrete 700 MHz frequencies, listing 12.5 kHz channels in order to facilitate the use of the Project 25 Phase 1 Common Air Interface.

## Public Safety Interoperability Use of VHF Maritime Spectrum

In its Third Memorandum Opinion and Order and Third Report and Order, FCC 00-348 released October 10, 2000, the FCC designated three maritime VHF channel pairs<sup>3</sup> for public safety interoperability use in 33 inland VHF Public Coast Service Areas (VPSCAs). One channel pair was designated for use in all 33 VPSCAs, and the other two pairs were designated by VPSCA. so as to provide two pairs for use in each inland VPSCA. These channels have been listed in this document as VTAC17/17D, VTAC18/18D, and VTAC19/19D.

In its Second Report and Order (FCC 08-208) on WT Docket 04-344<sup>4</sup>, released September 19, 2008. the FCC removed VHF Maritime Channels 84 (VTAC18/18D) and 85 (VTAC19/19D) from public safety interoperability use in the 33 inland VPSCAs. VHF Maritime Channel 25 (VTAC17/17D) remains available for use in the 33 inland VPSCAs. VTAC18/18D and VTAC19/19D have been removed in this revision of the Standard Channel Nomenclature.

# Standardized FCC Interoperability Channel Naming Format

Each FCC designated Interoperability Channel in the Public Safety Radio Services (47CFR Part 90) will have a unique name developed according to a standardized format. This format consists of a maximum of 8 characters,<sup>5</sup> as follows:

# Btype##M

This format is broken down as follows:

#### B **Spectrum Band**

The Spectrum Band designator is a unique single alpha or numeric character to designate the Public Safety spectrum segment the channel is found within:

- L VHF Low band (30 – 50 MHz)
- V VHF High Band (150.8 – 162.0 MHz)
- U UHF Band (450 – 470 MHz)
- 700 MHz Public Safety Narrowband Voice Band (769 775 / 799 805 7 MHz)
- 8 800 MHz NPSPAC band after the rebanding process (806 - 809 / 851 -854 MHz)

<sup>3</sup> The channels so designated were Channel 25 (157.250/162.850 MHz), Channel 84

<sup>4</sup> Second Report and Order In the Matter of Amendment of the Commission's Rules Regarding Maritime Automatic Identification Systems, FCC 08-208 at 20.

<sup>5</sup> An 8-character limit was adopted by the NCC after discussions with major equipment manufacturers determined this was the minimum display being delivered in 2003 for radios ordered with a display option. This 8-character size was again confirmed with several manufacturers in early 2007.

#### type Channel Use designator

The Channel Use designator is an alphanumeric 3 or 4 place tag to signify the primary purpose of operations on the channel. In some cases, the Channel Use has been specified in FCC rules or related Orders.

- Channel is dedicated nationwide for the express purpose of Interoperability CALL calling only.
- DATA Channel is reserved nationwide for the express purpose of data transmission only.
- FIRE Primarily used for interagency incident communications by Fire licensees
- Primarily used for interagency incident communications between Public Safety GTAC eligible entities and eligible non-governmental organizations
- LAW Primarily used for interagency incident communications by Police licensees
- MED Primarily used for interagency incident communications by Emergency Medical Service licensees
- Primarily used for on-scene interagency incident communications by any MOB Public Safety eligible, using vehicular repeaters (FCC Station Class MO3)
- TAC Primarily used for interagency communications by any Public Safety eligible

#### ## **Unique Channel Identifier**

The Unique Channel Identifier is a numeric 1 or 2 place tag to uniquely identify the specific channel. Channel Identifiers are grouped by band segment as follows:

- 1-9 VHF Low band (30-50 MHz) [No leading Zero used]
- 10-39 VHF High band (150.8 – 162 MHz)
- UHF band (450 470 MHz) 40-49
- 700 MHz (769-775/799-805 MHz) 50-89
- 90-99 800 MHz "NPSPAC" band (806-809/851-854 MHz) [Post-rebanding]

Notes:

- Starting in VHF High band, Channel Identifiers are grouped by Channel Use type, with • Channel Identifiers ending in "0" reserved for Interoperability Calling use.
- Channels Identifiers specified for Emergency Medical Services ("MED") in this document are • numbered to avoid conflict with the FCC's UHF medical channel naming methodology specified in 47CFR90.20(d)(65) and 47CFR90.20(d)(66)(i).
- Channel Identifiers not specified in Tables 1 and 2 are reserved for future use.

#### Modifier Μ

The Modifier character is a single alphanumeric tag to identify a modification to the default operation type on the channel / channel pair:

D Direct or "Talk around" use [Simplex operations on the output channel of a pair normally designated for half-duplex or mobile relay operations.

Tables 1 and 2 show the FCC designated Interoperability Channels and the related Channel Name.

## "Short Form" (6 Character) Names

To facilitate the use of these Channel Names in older radios with 6 characters available in the display, the first "Band" character is deleted, and the "type " Channel Use field is limited to the first 3 characters. Table 3 shows the 6 Character "Short Form" names for the FCC designated Interoperability Channels. Short Form names are not applicable to the 700 MHz Band since equipment for this band is new and does not have the character limitation.

# Standardized Tone Squelch or Network Access Codes

The use of a common Continuous Tone Controlled Squelch System (CTCSS) tone of 156.7 Hz for transmit and receive on national Interoperability Channels was originally specified in the NPSPAC proceedings (Docket 87-112). In many areas, the 800 MHz Planning Regions allowed the use of an additional (secondary) access tone for in-cabinet repeat operations, as long as the 156.7 Hz tone was monitored by a live dispatcher or always repeated upon receipt. 156.7 Hz is always transmitted by repeaters.

In the development process of the Standard Channel Nomenclature for the Public Safety Interoperability Channels, the NCC Interoperability Committee's Working Group recommended that 156.7 Hz CTCSS transmit and receive be used for all analog voice operations on all interoperability channels in all bands. For P-25 voice operations, the NCC Working Group initially recommended the 156.7 Hz equivalent Network Access Code (NAC) of \$61F. This recommendation was changed in 2001 to use the default ("carrier squelch equivalent") NAC of \$293.

The NTIA has adopted 167.9 Hz as the common CTCSS tone to be used on NTIA analog interoperability frequencies. NTIA adopted a NAC of \$68F for use on NTIA digital interoperability frequencies.

# **Analog Operations**

The use of CTCSS Tone 156.7 Hz has been adopted for all analog operations on FCC designated Interoperability Channels:

- 1. All (fixed and subscriber) analog transmitters will encode 156.7 Hz.
- 2. Subscriber receivers should be set for carrier squelch operations unless conditions in the area require the use of tone protection to mitigate adjacent channel interference, or interference from intermodulation products. In those cases, receivers will decode 156.7 Hz.
- 3. Subject to the approval of applicable Statewide Communications Interoperability Plans and/or FCC-approved Regional Plans, Mobile Relay stations that are part of a Local, Regional, or Statewide interoperability network may be equipped with a second receive CTCSS tone to provide local ("in cabinet") relay operation, provided:
  - a. The relay transmitter continues to transmit the Common CTCSS Tone of 156.7 Hz so that all users within range of the station are aware the station is in use;

- b. The relay will accept the Common CTCSS Tone of 156.7 Hz and present the audio accompanying the 156.7 Hz-encoded transmission for automatic in-cabinet repeat or to a live operator at the appropriate controlling dispatch facility; and
- c. The operational configuration of the Mobile Relay Station is published in applicable interoperability resource tracking documents (such as the appropriate Tactical Interoperability Communications Plan, Statewide Communications Interoperability Plan, and/or FCC-approved Regional Plan) and databases (CAPRAD, CASM, and NIIX<sup>6</sup>).

## **Digital Operations**

The use of Network Access Code (NAC) \$293 has been adopted for all digital operations on FCC designated Interoperability Channels:

- 4. Subject to the approval of applicable Statewide Communications Interoperability Plans and/or FCC-approved Regional Plans, Mobile Relay stations that are part of a Local, Regional, or Statewide interoperability network may be equipped with a second receive NAC to provide local ("in cabinet") relay operation, provided:
  - a. The relay transmitter continues to transmit the Common NAC of \$293 so that all users within range of the station are aware the station is in use;
  - b. The relay will accept the Common NAC of \$293 and present the audio accompanying the \$293-encoded transmission for automatic in-cabinet repeat or to a live operator at the appropriate controlling dispatch facility; and
  - c. The operational configuration of the Mobile Relay Station is published in applicable interoperability resource tracking documents (such as the appropriate Tactical Interoperability Communications Plan, Statewide Communications Interoperability Plan, and/or FCC-approved Regional Plan) and databases (CAPRAD, CASM, and NIIX).

# Subscriber Radio Programming

## Interoperability Channel Configurations

It is strongly recommended that interoperability channels listed with both a mobile relay and a direct configuration have both configurations of each channel programmed in each subscriber radio, regardless of the available infrastructure in the user's home area.

It is strongly recommended that state and local public safety and public service agencies programming the NTIA VHF and UHF Law Enforcement and Incident Response channels into their subscriber equipment partition those channels into a separate 'zone' or 'bank' designated as "Fed" or "NTIA," while maintaining the NTIA Channel designation, as a method to avoid confusion on the user's part between the NTIA channels and any similarly designated local channels.

<sup>6</sup> The Computer Assisted Pre-Coordination Resource and Database System (CAPRAD) is a regional planning tool designed to assist 700 MHz Regional Planning Committees with development of their plans. The Communications Asset Survey and Mapping Tool (CASM) was developed by the Interoperable Communications Technical Assistance Program within the U.S. Department of Homeland Security to assist urban areas, designated metropolitan areas and states with inventory and mapping/use of interoperability resources. The National Interoperability Information eXchange (NIIX) is a library of statewide and tactical interoperability planning documents under development by NPSTC.

## **Implementing This Protocol**

It is recognized that the implementation of this protocol must be done in an organized and coordinated manner. This is best accomplished in conjunction with a system programming refresh, such as during the 800 MHz rebanding process, or when other operational requirements such as a frequency change or a conversion to narrowbanded channels requires the subscriber fleet of radios to be adjusted.

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(SUBSCR	UENCY BER LOAD)	BASE, MOBILE, OR FIXED (REPEATER	ELIGIBILITY / PRIMARY USE	ORIGINAL	COMMON NAME	LIMITATIONS (47 CFR Part 90)
RECEIVE	TRANSMIT	OR CONTROL)		NAME		
MHz	MHz	Description of Markeller	FCC 30 MHz Public Safety Band			00.00(-)(0) [45]
39.4600	SIMPLEX	Base-Fixed-Mobile Base-Fixed-Mobile	Law Enforcement	3LAW1	LLAW1	90.20(c)(3) [15]
39.4800 45.8600	SIMPLEX	Base-Fixed-Mobile Base-Fixed-Mobile	Fire Proposed	3F/R2 3LAW3	LFIRE2	Prop. 90.20(c)(3) [1]
45.8800	SIMPLEX	Base-Fixed-Mobile	Law Enforcement Fire	3FIR4	LLAW3 LFIRE4	90.20(c)(3) [15] 90.20(c)(3) [19]
		Base-Fixed-Wobile			LFIKE4	90.20(C)(5) [19]
MHz	MHz SIMPLEX	Deep Fixed Mahile	FCC 150 - 162 MHz Public Safety Band		VOALLAD	00.00(-)(0) [00.00
155.7525 151.1375	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	1CAL18 1TAC5	VCALL10 VTAC11	90.20(c)(3) [80,83
	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible			90.20(c)(3) [80]
154.4525		Base-Fixed-Mobile	Any Public Safety Eligible	1TAC13	VTAC12	90.20(c)(3) [80]
158.7375 159.4725	SIMPLEX	Base-Fixed-Mobile Base-Fixed-Mobile	Any Public Safety Eligible Any Public Safety Eligible	1TAC22 1TAC23	VTAC13 VTAC14	90.20(c)(3) [80]
	157.2500	Mobile-Fixed	Allocated for Public Safety Use in 33	1TAC19D	VTAC14	90.20(c)(3) [80]
161.8500	SIMPLEX	Base-Fixed-Mobile	Inland VPCSAs/EAs	1TAC19D	VTAC17D	90.20(g)
154.2800	SIMPLEX	Base-Fixed-Mobile	Fire	1FIR9	VFIRE21	90.20(c)(3) [19]
154.2650	SIMPLEX	Base-Fixed-Mobile	Fire	1FIR7	VFIRE22	90.20(c)(3) [19]
154.2950	SIMPLEX	Base-Fixed-Mobile	Fire	1FIR11	VFIRE23	90.20(c)(3) [19]
154.2725	SIMPLEX	Base-Fixed-Mobile	Fire	1FIR8	VFIRE24	90.20(c)(3) [19]
154.2875	SIMPLEX	Base-Fixed-Mobile	Fire	1FIR10	VFIRE25	90.20(c)(3) [19]
154.3025	SIMPLEX	Base-Fixed-Mobile	Fire	1FIR12	VFIRE26	90.20(c)(3) [19]
155.3400	SIMPLEX	Base-Fixed-Mobile	EMS	1EMS14	VMED28	90.20(c)(3) [40]
155.3475	SIMPLEX	Base-Fixed-Mobile	EMS	1EMS15	VMED29	90.20(c)(3) [40]
155.4750	SIMPLEX	Base-Fixed-Mobile	Law Enforcement	1LAW16	VLAW31	90.20(c)(3) [41]
155.4825	SIMPLEX	Base-Fixed-Mobile	Law Enforcement	1LAW17	VLAW32	90.20(c)(3) [41]
MHz	MHz	Edge I Med Inobile	NTIA VHF Law Enforcement Channels		TERITOR	00.20(0)(0)[41]
			LE Calling	,		FCC Public Notice
67.0875	SIMPLEX	Base-Fixed-Mobile	Analog - 167.9 Hz CTCSS TX		LEA	DA 01-1621
		LE Tactical			FCC Public Notic	
167.0875	67.0875 162.0875	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		LE1	DA 01-1621
			LE Tactical			FCC Public Notice
167.2500	162.2625	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		LE 2	DA 01-1621
			LE Tactical			FCC Public Notice
167.7500	162.8375	Mobile-Fixed	P25 Digital - \$68F NAC	1	LE 3	DA 01-1621
		100 000 million 10	LE Tactical			FCC Public Notice
168.1125	163.2875	Mobile-Fixed	P25 Digital - \$68F NAC		LE4	DA 01-1621
			LE Tactical			FCC Public Notice
168.4625	163.4250	Mobile-Fixed	P25 Digital - \$68F NAC		LE 5	DA 01-1621
	-	-	LE Tactical (Direct)			FCC Public Notice
167.2500	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE 6	DA 01-1621
		-	LE Tactical (Direct)			FCC Public Notice
167.7500	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE7	DA 01-1621
			LE Tactical (Direct)			FCC Public Notice
168.1125	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE 8	DA 01-1621
			LE Tactical (Direct)			FCC Public Notice
168.4625	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE 9	DA 01-1621
MHz	MHz		NTIA VHF Incident Response Channel	s		
			Incident Calling	1		FCC Public Notice
69.5375	164.7125	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		NC 1CALL	DA 01-1621
			Incident Tactical			FCC Public Notio
70.0125	165.2500	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		IR 1	DA 01-1621
0.000		10.10100.0010	Incident Tactical			FCC Public Notic
170.4125	165.9625	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		IR 2	DA 01-1621
			Incident Tactical	1		FCC Public Notice
70.6875	166.5750	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		IR 3	DA 01-1621
		2. 13 at 1	Incident Tactical			FCC Public Notio
173.0375	167.3250	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		IR 4	DA 01-1621
10.0070			Incident Calling (Direct))			FCC Public Notic
		Base-Fixed-Mobile	Analog - 167.9 Hz CTCSS TX	1	IR 5	DA 01-1621
	SIMPLEX	Date-I inco-Incone				DIT VI IVET
169.5375						FCC Public Notice
	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 6	FCC Public Notic DA 01-1621

NPSTC is working with our Federal partners to have a revised Public Notice issued by the FCC.

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(SUBSCRI	UENCY BER LOAD)	BASE,MOBILE, OR FIXED (REPEATER	ELIGIBILITY / PRIMARY USE	ORIGINAL NCC	COMMON NAME	LIMITATIONS (47 CFR Part 90)
RECEIVE	TRANSMIT	OR CONTROL)		NAME		<u></u>
MHz	MHz	NTIA	VHF Incident Response Channels (con	tinued)		
170.4125	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 7	FCC Public Notice DA 01-1621
170.6875	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 8	FCC Public Notice DA 01-1621
173.0375	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 9	FCC Public Notice DA 01-1621
MHz	MHz		NTIA UHF Law Enforcement Channels	5		
1110075			LE Calling		150	FCC Public Notice
414.0375	SIMPLEX	Base-Fixed-Mobile	Analog - 167.9 Hz CTCSS TX LE Tactical		LE B	DA 01-1621 FCC Public Notice
409.9875	418.9875	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX LE Tactical	ļ	LE 10	DA 01-1621 FCC Public Notice
410.1875	419.1875	Mobile-Fixed	P25 Digital - \$68F NAC		LE 11	DA 01-1621
410.6125	419.6125	Mobile-Fixed	LE Tactical P25 Digital - \$68F NAC		LE 12	FCC Public Notice DA 01-1621
414.0625	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 13	FCC Public Notice DA 01-1621
414.3125	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 14	FCC Public Notice DA 01-1621
414.3375	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 15	FCC Public Notice DA 01-1621
409.9875	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 16	FCC Public Notice DA 01-1621
410.1875	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 17	FCC Public Notice DA 01-1621
410.6125	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 18	FCC Public Notice
MU	MU					DA 01-1621
MHz	MHz		NTIA UHF Incident Response Channel	5		FOO DULL NUT
410.2375	164.7125	Mobile-Fixed	Incident Calling Analog - 167.9 Hz CTCSS TX		NC 2CALL	FCC Public Notice DA 01-1621
410.4375	165.2500	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 10	FCC Public Notice DA 01-1621
410.6375	165.9625	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 11	FCC Public Notice DA 01-1621
410.8375	166.5750	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 12	FCC Public Notice DA 01-1621
413.1875	167.3250	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 13	FCC Public Notice DA 01-1621
413.2125	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 14	FCC Public Notice DA 01-1621
410.2375	SIMPLEX	Base-Fixed-Mobile	Incident Calling (Direct)) Analog - 167.9 Hz CTCSS TX		IR 15	FCC Public Notice DA 01-1621
410.4375	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 16	FCC Public Notice DA 01-1621
410.6375	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct)		IR 17	FCC Public Notice DA 01-1621
410.8375	SIMPLEX	Base-Fixed-Mobile	Analog - 167.9 Hz CTCSSTX Incident Tactical (Direct)		IR 18	FCC Public Notice
	of the NTIA Inte	eroperability Channels b ince DA 01-1621 was is	Analog - 167.9 Hz CTCSS TX by FCC licensees is subject to the conditi isued by the FCC in 2001, NTIA has mod ur Federal partners to have a revised Pul	lified the table of	CC Public Notic frequencies.	DA 01-1621 e DA 01-1621.
MHz	MHz		FCC 450 - 470 MHz Public Safety Ban	d		
	458.2125	Mobile-Fixed		4CAL27D	UCALL40	
453.2125	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	4CAL270	UCALL40	90.20(c)(3) [80,83]
150 1005	458.4625	Mobile-Fixed		4TAC28D	UTAC41	
453.4625	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	4TAC28	UTAC41D	90.20(c)(3) [80]
453.7125	458.7125 SIMPLEX	Mobile-Fixed Base-Fixed-Mobile	Any Public Safety Eligible	4TAC29D 4TAC29	UTAC42 UTAC42D	90.20(c)(3) [80]
453.8625	458.8625	Mobile-Fixed	Any Public Safety Eligible	4TAC30D	UTAC43	90.20(c)(3) [80]
	SIMPLEX	Base-Fixed-Mobile		4TAC30	UTAC43D	

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		BASE, MOBILE, OR FIXED (REPEATER ELIGIBILITY / PRIMARY USE		ORIGINAL NCC	COMMON	LIMITATIONS
RECEIVE	BER LOAD) TRANSMIT	OR CONTROL)	ELIGIBILITY / PRIMARY USE	NAME	NAME	(47 CFR Part 90)
MHz	MHz		MHz Public Safety Band (12.5 kHz Cl			
	799.24375	Mobile-Fixed		7CAL59	7CALL50	
769.24375	SIMPLEX	Base-Fixed-Mobile	Calling Channel	TOALDO	7CALL50D	90.531(a)(1)(ii)
700 4 1075	799.14375	Mobile-Fixed	General Public Safety Service	7TAC58	7TAC51	
769.14375	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC51D	90.531(a)(1)(iii)
769.64375	799.64375	Mobile-Fixed	General Public Safety Service	7TAC62	7TAC52	00 521/a)/(1)/(0)
/09.043/5	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC52D	90.531(a)(1)(iii)
770.14375	800.14375	Mobile-Fixed	General Public Safety Service	7TAC66	7TAC53	90.531(a)(1)(iii)
110.14010	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC53D	00.001(0)(1)(1)
770.64375	800.64375	Mobile-Fixed	General Public Safety Service	7TAC70	7TAC54	90.531(a)(1)(iii)
	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)	77.4000	7TAC54D	
769.74375	1079-1080 799.74375	Mobile-Fixed Base-Fixed-Mobile	General Public Safety Service	7TAC63	7TAC55 7TAC55D	
	800.24375	Mobile-Fixed		7TAC67	7TAC55D	
770.24375	SIMPLEX	Base-Fixed-Mobile	General Public Safety Service	117001	7TAC56D	
770 00075	800.99375	Mobile-Fixed	Other Dublis Constant	7TAC73	7GTAC57	
770.99375	SIMPLEX	Base-Fixed-Mobile	Other Public Service		7GTAC57D	
770.89375	800.89375	Mobile-Fixed	Mobile Repeater (M03 Use Primary)	7MOB72	7MOB59	
110.69315	SIMPLEX	Base-Fixed-Mobile	wobile Repeater (wos ose Frimary)		7MOB59D	
770.39375	800.39375	Mobile-Fixed	Law Enforcement	7LAW68	7LAW61	
	SIMPLEX	Base-Fixed-Mobile		71.014.000	7LAW61D	
770.49375	800.49375	Mobile-Fixed	Law Enforcement	7LAW69	7LAW62	
	SIMPLEX	Base-Fixed-Mobile		751064	7LAW62D	
769.89375	799.89375 SIMPLEX	Mobile-Fixed Base-Fixed-Mobile	Fire	7FIR64	7FIRE63 7FIRE63D	
	799.99375	Mobile-Fixed		7FIR65	7FIRE63D	
769.99375	SIMPLEX	Base-Fixed-Mobile	Fire	7FIROS	7FIRE64D	
	799.39375	Mobile-Fixed		7MED60	7MED65	
769.39375	SIMPLEX	Base-Fixed-Mobile	EMS	millboo	7MED65D	
700 10075	799.49375	Mobile-Fixed	540	7EMS61	7MED66	
769.49375	SIMPLEX	Base-Fixed-Mobile	EMS		7MED66D	
770.74375	800.74375	Mobile-Fixed		7DAT71	7DATA69	00.621/a)/(1)/(1)
//0./43/5	SIMPLEX	Base-Fixed-Mobile	Mobile Data		7DATA69D	90.531(a)(1)(i)
773.25625	803.25625	Mobile-Fixed	Calling Channel	7CAL75	7CALL70	90.531(a)(1)(ii)
110.20020	SIMPLEX	Base-Fixed-Mobile			7CALL70D	80.00 (a)(1)(i)
773.10625	803.10625	Mobile-Fixed	General Public Safety Service	7TAC74	7TAC71	90.531(a)(1)(iii)
	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC71D	NOA Y
773.60625	803.60625 SIMPLEX	Mobile-Fixed	General Public Safety Service	7TAC78	7TAC72	90.531(a)(1)(iii)
	804.10625	Base-Fixed-Mobile Mobile-Fixed	(secondary trunked) General Public Safety Service	7TAC82	7TAC72D 7TAC73	
774.10625	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)	/TAC02	7TAC73D	90.531(a)(1)(iii)
	804.60625	Mobile-Fixed	General Public Safety Service	7TAC86	7TAC74	
774.60625	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC74D	90.531(a)(1)(iii)
770 75005	803.75625	Mobile-Fixed		7TAC79	7TAC75	
773.75625	SIMPLEX	Base-Fixed-Mobile	General Public Safety Service		7TAC75D	
774.25625	804.25625	Mobile-Fixed	General Public Safety Service	7TAC83	7TAC76	
114.20020	SIMPLEX	Base-Fixed-Mobile	Concrar Public Calety Cervice		7TAC76D	
774.85625	804.85625	Mobile-Fixed	Other Public Service	7TAC89	7GTAC77	
	SIMPLEX	Base-Fixed-Mobile			7GTAC77D	
774.50625	804.50625	Mobile-Fixed	Mobile Repeater (M03 Use Primary)	7MOB88	7MOB79	
	SIMPLEX	Base-Fixed-Mobile		7LAW84	7MOB79D	
774.00625	804.00625 SIMPLEX	Mobile-Fixed Base-Fixed-Mobile	Law Enforcement	/LAVV84	7LAW81 7LAW81D	
	804.35625	Mobile-Fixed		7LAW85	7LAW82	
774.35625	SIMPLEX	Base-Fixed-Mobile	Law Enforcement	TEAW00	7LAW82D	
770 50005	803,50625	Mobile-Fixed	<b>5</b> 1	7FIR80	7FIRE83	
773.50625	SIMPLEX	Base-Fixed-Mobile	Fire		7FIRE83D	
772 05005	803.85625	Mobile-Fixed	Eiro	7FIR81	7FIRE84	
773.85625	SIMPLEX	Base-Fixed-Mobile	Fire		7FIRE84D	
773.00625	803.00625	Mobile-Fixed	EMS	7EMS76	7MED86	
110.00020	SIMPLEX	Base-Fixed-Mobile			7MED86D	
773.35625	803.35625	Mobile-Fixed	EMS	7EMS77	7MED87	
	SIMPLEX	Base-Fixed-Mobile			7MED87D	
774.75625	804.75625	Mobile-Fixed	Mobile Data	7DAT87	7DATA89	90.531(a)(1)(i)
	SIMPLEX	Base-Fixed-Mobile			7DATA89D	

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FREQUENCY (SUBSCRIBER LOAD)		BASE,MOBILE, OR FIXED (REPEATER	ELIGIBILITY / PRIMARY USE	ORIGINAL NCC	COMMON NAME	LIMITATIONS (47 CFR Part 90)			
RECEIVE	TRANSMIT	OR CONTROL)		NAME					
MHz	MHz	FCC	FCC 800 MHz NPSPAC Band (Post-Rebanding)						
851.0125	806.0125	Mobile-Fixed	Any Public Safety Eligible	8CAL90	8CALL90	90.16			
051.0125	SIMPLEX	Base-Fixed-Mobile	Any Public Salety Eligible	8CAL90D	8CALL90D	90.16			
851.5125	806.5125	Mobile-Fixed	Any Public Safety Eligible	8TAC91	8TAC91	90.16			
001.0120	SIMPLEX	Base-Fixed-Mobile	Any Public Salety Eligible	8TAC91D	8TAC91D	90.10			
852.0125	807.0125	Mobile-Fixed	Any Public Safety Eligible	8TAC92	8TAC92	90.16			
002.0120	SIMPLEX	Base-Fixed-Mobile	Any Public Salety Eligible	8TAC92D	8TAC92D	90.10			
852.5125	807.5125	Mobile-Fixed	Any Dublic Sofety Elizible	8TAC93	8TAC93	90.16			
002.0120	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	8TAC93D	8TAC93D	90.10			
853.0125	808.0125	Mobile-Fixed	Any Public Safety Eligible	8TAC94	8TAC94	90.16			
000.0120	SIMPLEX	Base-Fixed-Mobile	Any Fublic Salety Eligible	8TAC94D	8TAC94D	90.10			

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(SUBSCR	UENCY BER LOAD)	BASE, MOBILE, OR FIXED (REPEATER	ELIGIBILITY / PRIMARY USE	ORIGINAL	COMMON NAME	LIMITATIONS (47 CFR Part 90
RECEIVE	TRANSMIT	OR CONTROL)		NAME		
MHz	MHz		FCC 30 MHz Public Safety Band	_		
39.4600	SIMPLEX	Base-Fixed-Mobile	Law Enforcement	3LAW1	LLAW1	90.20(c)(3) [15]
39.4800	SIMPLEX	Base-Fixed-Mobile	Fire Proposed	3FIR2	LFIRE2	Prop. 90.20(c)(3) [1
45.8600	SIMPLEX	Base-Fixed-Mobile	Law Enforcement	3LAW3	LLAW3	90.20(c)(3) [15]
45.8800	SIMPLEX	Base-Fixed-Mobile	Fire	3FIR4	LFIRE4	90.20(c)(3) [19]
MHz	MHz		FCC 150 - 162 MHz Public Safety Band	t		
151.1375	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	1CAL18	VTAC11	90.20(c)(3) [80]
154.2650	SIMPLEX	Base-Fixed-Mobile	Fire	1TAC5	VFIRE22	90.20(c)(3) [19]
154.2725	SIMPLEX	Base-Fixed-Mobile	Fire	1TAC13	VFIRE24	90.20(c)(3) [19]
154.2800	SIMPLEX	Base-Fixed-Mobile	Fire	1TAC22	VFIRE21	90.20(c)(3) [19]
154.2875	SIMPLEX	Base-Fixed-Mobile	Fire	1TAC23	VFIRE25	90.20(c)(3) [19]
154.2950	SIMPLEX	Base-Fixed-Mobile	Fire	1TAC19D	VFIRE23	90.20(c)(3) [19]
154.3025	SIMPLEX	Base-Fixed-Mobile	Fire	1TAC24	VFIRE26	90.20(c)(3) [19]
154.4525	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	1TAC20D	VTAC12	90.20(c)(3) [80]
155.3400	SIMPLEX	Base-Fixed-Mobile	EMS	1TAC25	VMED28	90.20(c)(3) [40]
155.3475	SIMPLEX	Base-Fixed-Mobile	EMS	1TAC21D	VMED29	90.20(c)(3) [40]
155.4750	SIMPLEX	Base-Fixed-Mobile	Law Enforcement	1TAC26	VLAW31	90.20(c)(3) [41]
155.4825	SIMPLEX	Base-Fixed-Mobile	Law Enforcement	1FIR9	VLAW32	90.20(c)(3) [41]
155.7525	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	1FIR7	VCALL10	90.20(c)(3) [41]
158.7375	SIMPLEX	Base-Fixed-Mobile	Any Public Safety Eligible	1FIR11	VTAC13	90.20(c)(3) [80]
		Base-Fixed-Mobile		1FIR8		
159.4725	SIMPLEX		Any Public Safety Eligible Allocated for Public Safety Use in 33		VTAC14	90.20(c)(3) [80]
161.8500	157.2500	Mobile-Fixed	[1] A. CHARLER J. M. M. STERRER, M. L. MARLER, "Net A COMPARISON OF A CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT A CONTRACTACT OF A CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT OF	1FIR10	VTAC17	90.20(g)
	SIMPLEX	Base-Fixed-Mobile	Inland VPCSAs/EAs	1FIR12	VTAC17D	
MHz	MHz		NTIA VHF Law Enforcement Channels	3		
167.0875	SIMPLEX	Base-Fixed-Mobile	LE Calling		LEA	FCC Public Notice
101.0010	Onn LEX	Baserincumobile	Analog - 167.9 Hz CTCSS TX	2 S		DA 01-1621
167.0875	162.0875	Mobile-Fixed	LE Tactical		LE1	FCC Public Notic
107.0070	102.0070	MODIE-T IXEG	Analog - 167.9 Hz CTCSS TX			DA 01-1621
167.2500	162.2625	Mobile-Fixed	LE Tactical		LE 2	FCC Public Notic
107.2500	102.2020	Wobile-Tixed	P25 Digital - \$68F NAC			DA 01-1621
167.2500	2500 CIMPLEY	0 SIMPLEX Base-Fixed-Mobile	LE Tactical (Direct)		LE 6	FCC Public Notic
107.2300	SIMPLEA	base-rixed-wobile	P25 Digital - \$68F NAC		LEO	DA 01-1621
407 7500	400.0075	Mahila Finad	LE Tactical	1 A A A A A A A A A A A A A A A A A A A	150	FCC Public Notic
167.7500	162.8375	Mobile-Fixed	P25 Digital - \$68F NAC		LE 3	DA 01-1621
407 7500		Deep Elizad Mahila	LE Tactical (Direct)		1.5.7	FCC Public Notic
167.7500	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE7	DA 01-1621
	100.0075	11.12. E	LE Tactical			FCC Public Notic
168.1125	163.2875	Mobile-Fixed	P25 Digital - \$68F NAC		LE4	DA 01-1621
			LE Tactical (Direct)			FCC Public Notic
168.1125	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE 8	DA 01-1621
2			LE Tactical			FCC Public Notic
168.4625	163.4250	Mobile-Fixed	P25 Digital - \$68F NAC		LE 5	DA 01-1621
			LE Tactical (Direct)			FCC Public Notic
168.4625	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE 9	DA 01-1621
						DA 01-1021
MHz	MHz		NTIA VHF Incident Response Channel	s		
169.5375	164.7125	Mobile-Fixed	Incident Calling		NC 1CALL	FCC Public Notic
			Analog - 167.9 Hz CTCSS TX			DA 01-1621
169.5375	SIMPLEX	Base-Fixed-Mobile	Incident Calling (Direct))		IR 5	FCC Public Notic
		Duoon mountoulle	Analog - 167.9 Hz CTCSS TX			DA 01-1621
170.0125	165.2500	Mobile-Fixed	Incident Tactical		IR 1	FCC Public Notic
	100.2000	Income-Fixed	Analog - 167.9 Hz CTCSS TX			DA 01-1621
170.0125	SIMPLEX	Base-Fixed-Mobile	INCIDENT TACTICAL (DIRECT)	S 8 8	IR 6	FCC Public Notic
110.0123	SIMPLEA	Desc-rived-wobile	Analog - 167.9 Hz CTCSS TX		into	DA 01-1621
170 4405	165 0605	Mobile-Fixed	Incident Tactical		IR 2	FCC Public Notic
170.4125	165.9625	Woblie-Fixed	Analog - 167.9 Hz CTCSS TX		IR 2	DA 01-1621
170 4405		B	Incident Tactical (Direct)	100	10.7	FCC Public Notic
170.4125	SIMPLEX	Base-Fixed-Mobile	Analog - 167.9 Hz CTCSS TX		IR 7	DA 01-1621
			Incident Tactical	1		FCC Public Notic
170.6875	166.5750	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		IR 3	DA 01-1621
				1		
Use	S	ince DA 01-1621 was is	ny FCC licensees is subject to the condition sued by the FCC in 2001, NTIA has mod ur Federal partners to have a revised Pub	ified the table of	frequencies.	e DA 01-1621.

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- Section - Sect	UENCY BER LOAD) TRANSMIT	BASE, MOBILE, OR FIXED (REPEATER OR CONTROL)	ELIGIBILITY / PRIMARY USE	ORIGINAL NCC NAME	COMMON NAME	LIMITATIONS (47 CFR Part 90)
MHz	MHz		/ HF Incident Response Channels (cor			
MITIZ		NTIA	Incident Tactical (Direct)	itinueu)		FCC Public Notice
170.6875	SIMPLEX	Base-Fixed-Mobile	Analog - 167.9 Hz CTCSS TX		IR 8	DA 01-1621
173.0375	167.3250	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 4	FCC Public Notice DA 01-1621
173.0375	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 9	FCC Public Notice DA 01-1621
MHz	MHz		NTIA UHF Law Enforcement Channel	\$		DAGINOZI
			LE Tactical			FCC Public Notice
409.9875	418.9875	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		LE 10	DA 01-1621
409.9875	SIMPLEX	Base-Fixed-Mobile	LE Calling (Direct) Analog - 167.9 Hz CTCSS TX		LE 16	FCC Public Notice DA 01-1621
410.1875	419.1875	Mobile-Fixed	LE Tactical P25 Digital - \$68F NAC		LE 11	FCC Public Notice DA 01-1621
410.1875	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 17	FCC Public Notice DA 01-1621
410.6125	419.6125	Mobile-Fixed	LE Tactical P25 Digital - \$68F NAC		LE 12	FCC Public Notice DA 01-1621
			LE Tactical (Direct)			FCC Public Notice
410.6125	SIMPLEX	Base-Fixed-Mobile	P25 Digital - \$68F NAC		LE 18	DA 01-1621
414.0375	SIMPLEX	Base-Fixed-Mobile	LE Calling Analog - 167.9 Hz CTCSS TX		LE B	FCC Public Notice DA 01-1621
414.0625	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 13	FCC Public Notice DA 01-1621
414.3125	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 14	FCC Public Notice DA 01-1621
414.3375	SIMPLEX	Base-Fixed-Mobile	LE Tactical (Direct) P25 Digital - \$68F NAC		LE 15	FCC Public Notice DA 01-1621
MHz	MHz		NTIA UHF Incident Response Channe	le		DA 01-1021
IMIT12	IMIT12		Incident Calling	15		FCC Public Notice
410.2375	164.7125	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX		NC 2CALL	DA 01-1621
410.2375	SIMPLEX	Base-Fixed-Mobile	Incident Calling (Direct)) Analog - 167.9 Hz CTCSS TX		IR 15	FCC Public Notice DA 01-1621
410.4375	165.2500	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 10	FCC Public Notice DA 01-1621
410.4375	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 16	FCC Public Notice DA 01-1621
410.6375	165.9625	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 11	FCC Public Notice DA 01-1621
410.6375	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct)		IR 17	FCC Public Notice
410.8375	166.5750	Mobile-Fixed	Analog - 167.9 Hz CTCSS TX Incident Tactical		IR 12	DA 01-1621 FCC Public Notice
	100.0100	moune r mea	Analog - 167.9 Hz CTCSS TX			DA 01-1621
410.8375	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct) Analog - 167.9 Hz CTCSS TX		IR 18	FCC Public Notice DA 01-1621
413.1875	167.3250	Mobile-Fixed	Incident Tactical Analog - 167.9 Hz CTCSS TX		IR 13	FCC Public Notice DA 01-1621
413.2125	SIMPLEX	Base-Fixed-Mobile	Incident Tactical (Direct)		IR 14	FCC Public Notice
	of the NTIA Inte S	eroperability Channels b ince DA 01-1621 was is	Analog - 167.9 Hz CTCSS TX ny FCC licensees is subject to the conditi isued by the FCC in 2001, NTIA has mod ur Federal partners to have a revised Pul	dified the table of	CC Public Notic frequencies.	DA 01-1621 e DA 01-1621.
MHz	MHz		FCC 450 - 470 MHz Public Safety Ban	d		
453.2125	458.2125	Mobile-Fixed	Any Public Safety Eligible	4CAL27D	UCALL40	90.20(c)(3) [80,83]
400.2120	SIMPLEX	Base-Fixed-Mobile	Finy Fubio Galety Englishe	4CAL27	UCALL40D	55.20(0)(5) [60,65]
453.4625	458.4625	Mobile-Fixed	Any Public Safety Eligible	4TAC28D	UTAC41	90.20(c)(3) [80]
	SIMPLEX	Base-Fixed-Mobile	, i ante estes Elginie	4TAC28	UTAC41D	
453.7125	458.7125 SIMPLEX	Mobile-Fixed Base-Fixed-Mobile	Any Public Safety Eligible	4TAC29D 4TAC29	UTAC42 UTAC42D	90.20(c)(3) [80]
453.8625	458.8625 SIMPLEX	Mobile-Fixed Base-Fixed-Mobile	Any Public Safety Eligible	4TAC30D 4TAC30	UTAC43 UTAC43D	90.20(c)(3) [80]
	GIWFLEA	Dase-Fixed-Wobile	Andreas and the second and the second second	417/030	0140400	

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	UENCY	BASE, MOBILE, OR		ORIGINAL	COMMON	LIMITATIONS
	BER LOAD)	FIXED (REPEATER ELIGIBILITY / PRIMARY USE		NCC	NAME	(47 CFR Part 90)
RECEIVE	TRANSMIT	OR CONTROL)		NAME		
MHz	MHz		MHz Public Safety Band (12.5 kHz Cl			
769.14375	799.14375	Mobile-Fixed	General Public Safety Service	7CAL59	7TAC51	90.531(a)(1)(iii)
	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)	TLACER	7TAC51D	and a second second
769.24375	799.24375 SIMPLEX	Mobile-Fixed Base-Fixed-Mobile	Calling Channel	7TAC58	7CALL50 7CALL50D	90.531(a)(1)(ii)
	799.39375	Mobile-Fixed		7TAC62	7MED65	
769.39375	SIMPLEX	Base-Fixed-Mobile	EMS	11/1002	7MED65D	
700 40075	799.49375	Mobile-Fixed	EMS	7TAC66	7MED66	
769.49375	SIMPLEX	Base-Fixed-Mobile			7MED66D	
769.64375	799.64375	Mobile-Fixed	General Public Safety Service	7TAC70	7TAC52	90.531(a)(1)(iii)
100.040.0	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC52D	00.001(0)(1)(1)
769.74375	799.74375	Mobile-Fixed	General Public Safety Service	7TAC63	7TAC55	
	SIMPLEX 799.89375	Base-Fixed-Mobile Mobile-Fixed		TLACCET	7TAC55D 7FIRE63	
769.89375	SIMPLEX	Base-Fixed-Mobile	Fire	7TAC67	7FIRE63D	
	799.99375	Mobile-Fixed		7TAC73	7FIRE64	
769.99375	SIMPLEX	Base-Fixed-Mobile	Fire	11/10/0	7FIRE64D	
770 4 6070	800.14375	Mobile-Fixed	General Public Safety Service	7MOB72	7TAC53	00.0017.3/03/03
770.14375	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC53D	90.531(a)(1)(iii)
770.24375	800.24375	Mobile-Fixed	General Public Safety Service	7LAW68	7TAC56	
110.24010	SIMPLEX	Base-Fixed-Mobile	General Public Galety Genvice		7TAC56D	
770.39375	800.39375	Mobile-Fixed	Law Enforcement	7LAW69	7LAW61	
	SIMPLEX	Base-Fixed-Mobile		751004	7LAW61D	
770.49375	800.49375 SIMPLEX	Mobile-Fixed Base-Fixed-Mobile	Law Enforcement	7FIR64	7LAW62 7LAW62D	
	800.64375	Mobile-Fixed	General Public Safety Service	7FIR65	7LAW62D 7TAC54	
770.64375	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)	71 11(05	7TAC54D	90.531(a)(1)(iii)
770 7 1070	800.74375	Mobile-Fixed		7MED60	7DATA69	00.0011-11110
770.74375	SIMPLEX	Base-Fixed-Mobile	Mobile Data		7DATA69D	90.531(a)(1)(i)
770.89375	800.89375	Mobile-Fixed	Mobile Repeater (M03 Use Primary)	7EMS61	7MOB59	
110.05575	SIMPLEX	Base-Fixed-Mobile	Wobile Repeater (MOS Ose Frimary)		7MOB59D	
770.99375	800.99375	Mobile-Fixed	Other Public Service	7DAT71	7GTAC57	
110.00010	SIMPLEX	Base-Fixed-Mobile		201120	7GTAC57D	
773.00625	803.00625	Mobile-Fixed	EMS	7CAL75	7MED86	
	SIMPLEX 803.10625	Base-Fixed-Mobile Mobile-Fixed	General Public Safety Service	7TAC74	7MED86D 7TAC71	
773.10625	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)	/1/0/4	7TAC71D	90.531(a)(1)(iii)
	803.25625	Mobile-Fixed		7TAC78	7CALL70	
773.25625	SIMPLEX	Base-Fixed-Mobile	Calling Channel		7CALL70D	90.531(a)(1)(ii)
773.35625	803.35625	Mobile-Fixed	EMS	7TAC82	7MED87	
113.33025	SIMPLEX	Base-Fixed-Mobile	EMIS		7MED87D	
773.50625	803.50625	Mobile-Fixed	Fire	7TAC86	7FIRE83	
110.00020	SIMPLEX	Base-Fixed-Mobile			7FIRE83D	
773.60625	803.60625	Mobile-Fixed	General Public Safety Service	7TAC79	7TAC72	90.531(a)(1)(iii)
	SIMPLEX 803.75625	Base-Fixed-Mobile Mobile-Fixed	(secondary trunked)	7TAC83	7TAC72D 7TAC75	
773.75625	803.75625 SIMPLEX	Base-Fixed-Mobile	General Public Safety Service	/1//000	7TAC75 7TAC75D	
	803.85625	Mobile-Fixed		7TAC89	7FIRE84	
773.85625	SIMPLEX	Base-Fixed-Mobile	Fire		7FIRE84D	
774 00005	804.00625	Mobile-Fixed	Low Enforcement	7MOB88	7LAW81	
774.00625	SIMPLEX	Base-Fixed-Mobile	Law Enforcement		7LAW81D	
774.10625	804.10625	Mobile-Fixed	General Public Safety Service	7LAW84	7TAC73	90.531(a)(1)(iii)
4. 10020	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC73D	
774.25625	804.25625	Mobile-Fixed	General Public Safety Service	7LAW85	7TAC76	
	SIMPLEX	Base-Fixed-Mobile	·····	751000	7TAC76D	
774.35625	804.35625 SIMPLEX	Mobile-Fixed Base Fixed Mobile	Law Enforcement	7FIR80	7LAW82 7LAW82D	
	804.50625	Base-Fixed-Mobile Mobile-Fixed		7FIR81	7LAW82D 7MOB79	
774.50625	SIMPLEX	Base-Fixed-Mobile	Mobile Repeater (M03 Use Primary)		7MOB79D	
	804.60625	Mobile-Fixed	General Public Safety Service	7EMS76	7TAC74	
774.60625	SIMPLEX	Base-Fixed-Mobile	(secondary trunked)		7TAC74D	90.531(a)(1)(iii)
774 75005	804.75625	Mobile-Fixed		7EMS77	7DATA89	00.531/a)/41/0
774.75625	SIMPLEX	Base-Fixed-Mobile	Mobile Data		7DATA89D	90.531(a)(1)(i)
774.85625	804.85625	Mobile-Fixed	Other Public Service	7DAT87	7GTAC77	
117.00020	SIMPLEX	Base-Fixed-Mobile	Galer Fublic Control		7GTAC77D	

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FREQUENCY (SUBSCRIBER LOAD)		BASE,MOBILE, OR FIXED (REPEATER	ELIGIBILITY / PRIMARY USE	ORIGINAL NCC	COMMON NAME	LIMITATIONS (47 CFR Part 90)			
RECEIVE	TRANSMIT	OR CONTROL)		NAME					
MHz	MHz	FCC	FCC 800 MHz NPSPAC Band (Post-Rebanding)						
851.0125	806.0125	Mobile-Fixed	Any Public Safety Eligible	8CAL90	8CALL90	90.16			
051.0125	SIMPLEX	Base-Fixed-Mobile	Any Public Salety Eligible	8CAL90D	8CALL90D	90.10			
851,5125	806.5125	Mobile-Fixed	Any Public Safety Eligible	8TAC91	8TAC91	90.16			
001.0120	SIMPLEX	Base-Fixed-Mobile	Ally Fublic Salety Eligible	8TAC91D	8TAC91D	90.10			
852.0125	807.0125	Mobile-Fixed	Any Public Safety Eligible	8TAC92	8TAC92	90.16			
002.0120	SIMPLEX	Base-Fixed-Mobile	Any Public Salety Eligible	8TAC92D	8TAC92D	30.10			
852.5125	807.5125	Mobile-Fixed	Any Public Safety Eligible	8TAC93	8TAC93	90.16			
002.0120	SIMPLEX	Base-Fixed-Mobile	Any Fublic Salety Eligible	8TAC93D	8TAC93D	80.10			
853.0125	808.0125	Mobile-Fixed	Any Public Safety Eligible	8TAC94	8TAC94	90.16			
000.0120	53.0125 SIMPLEX Base-Fixed-Mobile Any Public Safety E		Any Fublic Galety Eligible	8TAC94D	8TAC94D	30.10			

## Limitations

Tables 1 and 2 refer to various Limitations. These limitations refer to sections of 47 CFR Part 90, the FCC's Rules and Regulations for Public Safety use of the radio spectrum. These limitations are:

- 90.16 90.16 Public Safety National Plan. The Commission has established a National Plan which specifies special policies and procedures governing the Public Safety Pool (formally Public Safety Radio Services and the Special Emergency Radio Service). The National Plan is contained in the Report and Order in General Docket No. 87-112. The principal spectrum resource for the National Plan is the 806-809 MHz and the 851-854 MHz bands at locations farther then 110 km (68.4 miles) from the U.S./Mexico border and 140 km (87 miles) from the U.S./Canadian border (``border regions"). In the border regions, the principal spectrum for the National Plan may be different. The National plan establishes planning regions covering all parts of the United States, Puerto Rico, and the U.S. Virgin Islands. No assignments will be made in the spectrum designated for the National Plan until a regional plan for the area has been accepted by the Commission.
- 90.20(c)(3) [15] (15) This frequency is reserved for assignment to stations for intersystem operations only: Provided, however, that licensees holding a valid authorization to use this frequency for local base or mobile operations as of June 1, 1956, may continue to be authorized for such use.
- (16) This frequency is reserved primarily for assignment to state police licensees. 90.20(c)(3) [16] Assignments to other police licensees will be made only where the frequency is required for coordinated operation with the state police system to which the frequency is assigned. Any request for such assignment must be supported by a statement from the state police system concerned indicating that the assignment is necessary for coordination of police activities.
- 90.20(c)(3) [19] (19) This frequency is reserved for assignment to stations in this service for intersystem operations only and these operations must be primarily base-mobile communications.
- 90.20(c)(3) [40] (40) This frequency may be designated by common consent as an intersystem mutual assistance frequency under an area-wide medical communications plan.
- 90.20(c)(3) [41] (41) This frequency is available nationwide for use in police emergency communications networks operated under statewide law enforcement emergency communications plans.
- 90.20(c)(3) [80] (80) After December 7, 2000 this frequency is available primarily for public safety interoperability only communications. Stations licensed prior to December 7, 2000 may continue to use this frequency on a co-primary basis until January 1, 2005. After January 1, 2005, all operations will be secondary to co-channel interoperability communications.
- 90.20(c)(3) [83] (83) This interoperability frequency is dedicated for the express purpose of nationwide interoperability calling.
- 90.20(g) (g) Former public correspondence working channels in the maritime VHF (156-162 MHz) band allocated for public safety use in 33 inland Economic Areas. ... (2) In VHF Public Coast Service Areas (VPCSAs) 10-42, the duplex channel pair 157.250 MHz/161.850 MHz (VHF Maritime Channel 25) is allocated for public safety use by

entities eligible for licensing under paragraph (a) of this section, and is designated primarily for the purpose of interoperability communications. See 47 CFR 80.371(c)(1)(ii) for the definitions of VPCSAs.

- **90.531(a)(1)(i)** (i) *Narrowband data Interoperability channels.* The following channel pairs are reserved nationwide for the express purpose of data transmission only ...
- **90.531(a)(1)(ii)** (ii) *Narrowband calling Interoperability channels.* The following channel pairs are dedicated nationwide for the express purpose of *Interoperability* calling only ... They may not be used primarily for routine, day-to-day communications. Encryption is prohibited on the designated calling channels.
- **90.531(a)(1)(iii)** (iii) *Narrowband trunking Interoperability channels.* The following Interoperability channel pairs may be combined with the appropriate adjacent secondary trunking channel pairs and used in trunked mode on a secondary basis to conventional Interoperability operations:

		Post-Rebanding/	Narrowbanding		
Common Name	Short Name (6 char)	Rx FREQ	Rx CTCSS	Tx FREQ	Tx CTCSS
		VHF LOV	V BAND		
LLAW1	LLAW1	39.4600	156.7	45.8600	156.7
LLAW1D	LLAW1D	39.4600	156.7	Simplex	156.7
LFIRE2 (proposed)	LFIRE2	39.4800	156.7	Simplex	156.7
LLAW3D	LLAW3D	45.8600	156.7	Simplex	156.7
LFIRE4	LFIRE4	45.8800	156.7	Simplex	156.7
		VHF HIG	HBAND		
VCALL10	VCAL10	155.7525	none*	Simplex	156.7
VTAC11	VTAC11	151.1375	none*	Simplex	156.7
VTAC12	VTAC12	154.4525	none*	Simplex	156.7
VTAC13	VTAC13	158.7375	none*	Simplex	156.7
VTAC14	VTAC14	159.4725	none*	Simplex	156.7
VTAC17	VTAC17	161.8500	156.7	157.2500	156.7
VTAC17D	TAC17D	161.8500	156.7	Simplex	156.7
VFIRE21	VFIR21	154.2800	156.7	Simplex	156.7
VFIRE22	VFIR22	154.2650	156.7	Simplex	156.7
VFIRE23	VFIR23	154.2950	156.7	Simplex	156.7
VFIRE24	VFIR24	154.2725	156.7	Simplex	156.7
VFIRE25	VFIR25	154.2875	156.7	Simplex	156.7
VFIRE26	VFIR26	154.3025	156.7	Simplex	156.7
VMED28	VMED28	155.3400	156.7	Simplex	156.7
VMED29	VMED29	155.3475	156.7	Simplex	156.7
VLAW31	VLAW31	155.4750	156.7	Simplex	156.7
VLAW32	VLAW32	155.4825	156.7	Simplex	156.7
		UF	IF		
UCALL40	UCAL40	453.2125	none*	458.2125	156.7
UCALL40D	CAL40D	453.2125	none*	Simplex	156.7
UTAC41	UTAC41	453.4625	none*	458.4625	156.7
UTAC41D	TAC41D	453.4625	none*	Simplex	156.7
UTAC42	UTAC42	453.7125	none*	458.7125	156.7
UTAC42D	TAC42D	453.7125	none*	Simplex	156.7

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Common Name	Short Name (6 char)	Rx FREQ Rx CTCS		Tx FREQ	Tx CTCSS
UTAC43	UTAC43	453.8625	none*	458.8625	156.7
UTAC43D	TAC43D	453.8625	none*	Simplex	156.7
		800	MHz		
8CALL90	CAL90	851.0125	156.7	806.0125	156.7
8CALL90D	CAL90D	851.0125	156.7	Simplex	156.7
8TAC91	TAC91	851.5125	156.7	806.5125	156.7
8TAC91D	TAC91D	851.5125	156.7	Simplex	156.7
8TAC92	TAC92	852.0125	156.7	807.0125	156.7
8TAC92D	TAC92D	852.0125	156.7	Simplex	156.7
8TAC93	TAC93	852.5125	156.7	807.5125	156.7
8TAC93D	TAC93D	852.5125	156.7	Simplex	156.7
8TAC94	TAC94	853.0125	156.7	808.0125	156.7
8TAC94D	TAC94D	853.0125	156.7	Simplex	156.7

VTAC17 and VTAC17D are limited to use in 33 VCPSAs/EAs. See FCC Rules & Regulations 90.20(g)