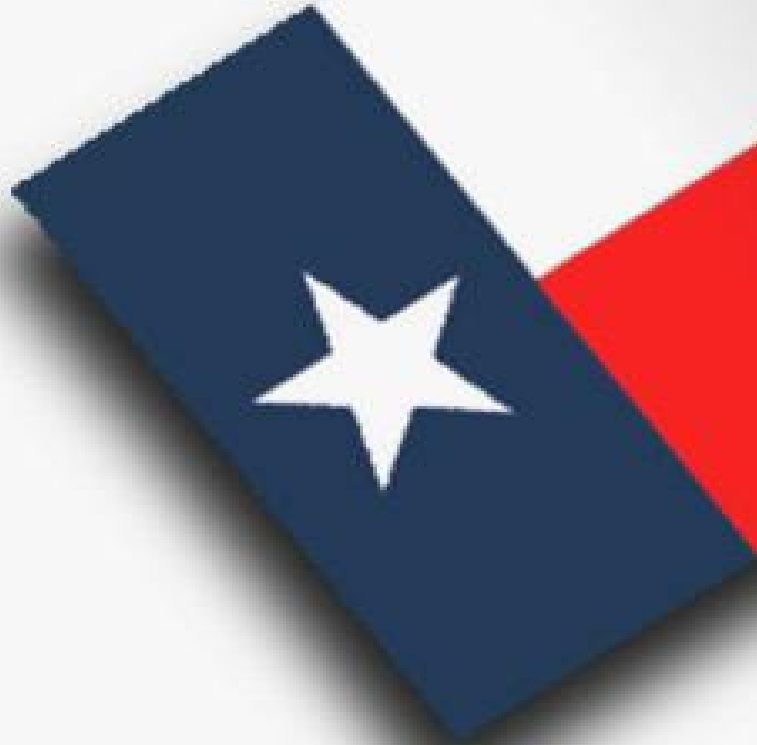


*Preparing Texas Today...
...for Tomorrow's Challenges*

*Texas Department of Public Safety
Robert Pletcher*



*Texas
Statewide Interoperability
Executive Committee*

Standardized 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 eight characters, as follows:

Btype##M

This format is broken down as follows:

B = the 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)

7 700 MHz Public Safety Band. This spectrum is divided into two individual blocks:

8 800 MHz NPSPAC band **after the rebanding process** (806 – 809 / 851 – 854 MHz)



type **Channel Use Designator**

The Channel Use Designator is an alphanumeric three- or four-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.

- CALL** Channel is dedicated nationwide for the express purpose of Interoperability 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
- GTAC** For interagency incident communications between Public Safety 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
- MOB** Primarily used for on-scene interagency incident communications by any 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 one- or two-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)
40-49	UHF band (450 – 470 MHz)
50-89	700 MHz
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 47CFR 90.20(d)(66)(i).
- Channel Identifiers not specified in Tables 1 and 2 are reserved for future use.

*** Numbering plan was implemented due to Federal users



M

Modifier

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 (repeater).



Standardized Tone Squelch or Network Access Codes

The use of **CTCSS Tone 156.7 Hz (was 126.7)** has been adopted for all analog operations on Interop 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 interoperability resource tracking documents (e.g.; regional Tactical Interoperability Communications Plan, Statewide Communications Interoperability Plan, FCC-approved Regional Plan) and databases (CAPRAD, CASM, and NIIX4).



DIGITAL OPERATIONS

The use of Network Access Code (NAC) \$293 **(was \$61F)** has been adopted for all digital operations on Interoperability Channels:

1. 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).



**VHF 150 MHz
(wideband)**

**Current Interoperability Channels
(available statewide)**

**800 MHz
(wideband)**

Texas Law 1
Texas Law 2
Texas Law 3

Texas Fire 1
Texas Fire 2
Texas Fire 3

Texas Med 1
Texas Med 2

8CALL90
8CALL90D
8TAC91
8TAC91D
8TAC92
8TAC92D
8TAC93
8TAC93D
8TAC94
8TAC94D
8TAC95D
8TAC96D
8TAC97D



VHF 150 MHz (narrowband)

155.7525	SIMPLEX	VCALL10
151.1375	SIMPLEX	VTAC11
154.4525	SIMPLEX	VTAC12
158.7375	SIMPLEX	VTAC13
159.4725	SIMPLEX	VTAC14
161.8500	SIMPLEX	VTAC17D
157.2500	REPEATER	VTAC17
161.8500	SIMPLEX	VTAC17D
157.2500	REPEATER	VTAC17
161.8500	SIMPLEX	VTAC17D
157.2500	REPEATER	VTAC17
154.2800	SIMPLEX	VFIRE21
154.2650	SIMPLEX	VFIRE22
154.2950	SIMPLEX	VFIRE23
154.2725	SIMPLEX	VFIRE24
154.2875	SIMPLEX	VFIRE25
154.3025	SIMPLEX	VFIRE26
155.3400	SIMPLEX	VMED28
155.3475	SIMPLEX	VMED29
155.4750	SIMPLEX	VLAW31
155.4825	SIMPLEX	VLAW32



UHF 450 MHz (narrowband)

453.2125 / 458.2125

SIMPLEX / REPEATER

UCALL40 / UCALL40D

453.2125 / 458.2125

SIMPLEX / REPEATER

UCALL41 / UCALL41D

453.2125 / 458.2125

SIMPLEX / REPEATER

UCALL42 / UCALL42D

453.2125 / 458.2125

SIMPLEX / REPEATER

UCALL43 / UCALL43D



7CALL50	7CALL70
7CALL50D	7CALL70D
7TAC51	7TAC71
7TAC51D	7TAC71D
7TAC52	7TAC72
7TAC52D	7TAC72D
7TAC53	7TAC73
7TAC53D	7TAC73D
7TAC54	7TAC74
7TAC54D	7TAC74D
7TAC55	7TAC75
7TAC55D	7TAC75D
7TAC56	7TAC76
7TAC56D	7TAC76D
7GTAC57	7GTAC77
7GTAC57D	7GTAC77D
7MOB59	7MOB79
7MOB59D	7MOB79D
7LAW61	7LAW81
7LAW61D	7LAW81D
7LAW62	7LAW82
7LAW62D	7LAW82D
7FIRE63	7FIRE83
7FIRE63D	7FIRE83D
7FIRE64	7FIRE84
7FIRE64D	7FIRE84D
7MED65	7MED86
7MED65D	7MED86D
7MED66	7MED87
7MED66D	7MED87D
7DATA69	7DATA89
7DATA69D	7DATA89D

←700 MHz Band
(digital)

←700 MHz (narrowband)

Narrowband →
Effective
1-1-2013

Narrowband →
Effective
1-1-2013

VCALL10
VTAC11
VTAC12
VTAC13
VTAC14
VTAC17D
VTAC17
VTAC17D
VTAC17
VTAC17D
VTAC17
VFIRE21
VFIRE22
VFIRE23
VFIRE24
VFIRE25
VFIRE26
VMED28
VMED29
VLAW31
VLAW32
UCALL40
UCALL40D
UCALL41
UCALL41D
UCALL42
UCALL42D
UCALL43
UCALL43D

8CALL90
8CALL90D
8TAC91
8TAC91D
8TAC92
8TAC92D
8TAC93
8TAC93D
8TAC94
8TAC94D
8TAC95D
8TAC96D
8TAC97D

Texas Law 1
Texas Law 2
Texas Law 3
Texas Fire 1
Texas Fire 2
Texas Fire 3
Texas Med 1
Texas Med 2

←Wideband but
being relocated

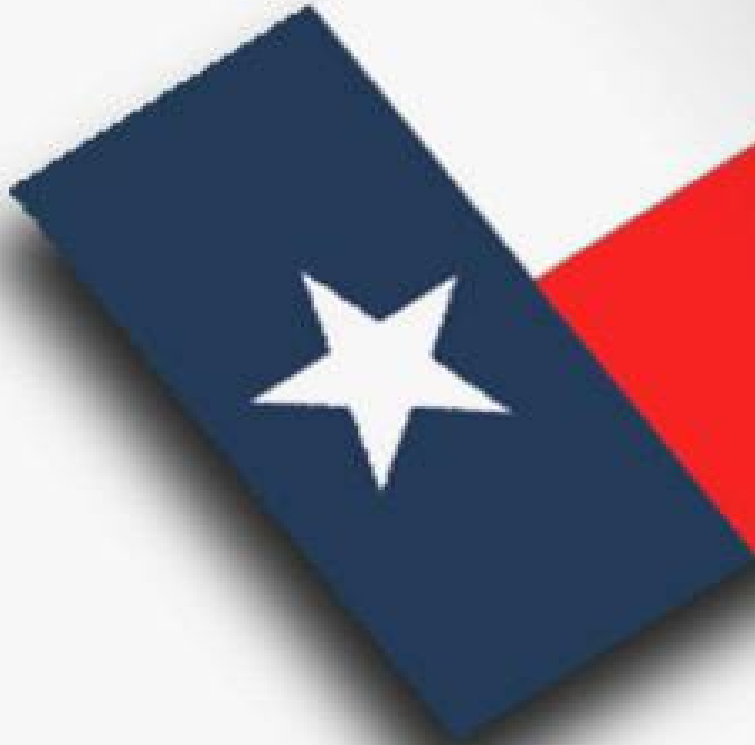
←Wideband
Go away 1-1-2013



Thank you
Any Questions?

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[HTTP:\tsiec.region49.org](http://\tsiec.region49.org)



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