Alaska Land Mobile Radio Communications System

Standard Channel Naming Convention Procedure 400-10

Version 14

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Document Revision History

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Acronyms and Definitions

Alaska Federal Executive Association (AFEA): federal government entities, agencies, and organizations, other than the Department of Defense, which operate on the shared ALMR system infrastructure.

Alaska Land Mobile Radio (ALMR) Communications System: the ALMR Communications System, as established in the Cooperative and Mutual Aid Agreement.

Alaska Municipal League: a voluntary non-profit organization in Alaska that represents 165 cities, boroughs, and unified municipalities.

Alaska Public Safety Communication Services (APSCS): a State of Alaska (SOA) office in the Department of Public Safety (DPS) that operates and maintains the SOA Telecommunications System (SATS) supporting ALMR and provides public safety communication services and support to state agencies.

Department of Defense (DoD) – Alaska: Alaskan Command, US Air Force and US Army component services operating under United States Pacific Command and United States Northern Command.

Department of Public Safety (DPS): a State of Alaska (SOA) department where the SOA Telecommunications System (SATS) and ALMR programs reside.

Executive Council: governing body made up of three voting members and two associate members representing the original four constituency groups: the State of Alaska, the Department of Defense, Federal Non-DoD agencies (represented by the Alaska Federal Executive Association), and local municipal/government (represented by the Alaska Municipal League and the Municipality of Anchorage).

Federal Communications Commission (FCC): for the purposes of ALMR, the Federal level governing body that approves the use of commercial, maritime, state, local and other agencies that are not a part of the Department of Defense or other Federal agencies radio frequency spectrum through the issuance of radio station authorizations once coordination with all potentially affected agencies has been completed. The approvals will in most cases (exceptions might be waivers or special temporary authority) be for use of a particular portion of a frequency band that has been pre-authorized through the frequency band table of allocations. In addition, the FCC maintains the communications tower registration program.

Information Assurance (IA): information operations that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. This includes providing for

restoration of information systems by incorporating protection, detection, and reaction capabilities.

Local Governments: those Alaska political subdivisions defined as municipalities in AS 29.71.800(14).

Member: a public safety agency including, but not limited to, a general government agency (local, state, tribal, or federal), its authorized employees and personnel (paid or volunteer), and its service provider, participating in and using the system under a membership agreement.

Municipality of Anchorage (MOA): the MOA covers 1,951 square miles with a population of over 300,000. The MOA stretches from Portage, at the southern border, to the Knik River at the northern border, and encompasses the communities of Girdwood, Indian, Anchorage, Eagle River, Chugiak/Birchwood, and the native village of Eklutna.

National Coordination Center (NCC): a Federal advisory committee chartered by the Federal Communications Commission from 1999 to 2003, which identified a need for a standard channel naming convention.

National Public Safety Telecommunications Council (NPSTC): a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

National Telecommunications and Information Administration (NTIA): the President's principal adviser on telecommunications and information policy issues, and in this role frequently works with other Executive Branch agencies to develop and present the Administration's position on these issues; manages the Federal use of spectrum; performs cutting-edge telecommunications research and engineering, including resolving technical telecommunications issues for the Federal government and private sector; and administers infrastructure and public telecommunications facilities grants.

Operations Management Office (OMO): develops recommendations for policies, procedures, and guidelines; identifies technologies and standards; and coordinates intergovernmental resources to facilitate communications interoperability with emphasis on improving public safety and emergency response communications.

SAFECOM: a communications program of the Department of Homeland Security. SAFECOM provides research, development, testing and evaluation, guidance, tools, and templates on interoperable communications-related issues to local, tribal, state, and Federal emergency response agencies.

State of Alaska (SOA): the primary maintainer of the State's infrastructure, and shared owner of the ALMR system. The State of Alaska sponsors local/municipal agencies onto the system.

State of Alaska Telecommunications Systems (SATS): the State of Alaska telecommunications system microwave network, which is managed by APSCS.

System Management Office (SMO): the team of specialists responsible for management of maintenance and operations of the system

User: an agency, person, group, organization, or other entity which has an existing written membership agreement to operate on ALMR with one of the parties to the Cooperative and Mutual Aid Agreement. The terms user and member are synonymous and interchangeable. All terms and conditions of the Cooperative and Mutual Aid agreement defined apply to local/municipal government agencies that are sponsored/represented by the State of Alaska.

User Council: governing body responsible for recommending all operational and maintenance decisions affecting the system. Under the direction and supervision of the Executive Council, the User Council has the responsibility for management oversight and operations of the system. The User Council oversees the development of system operations plans, procedures and policies under the direction and guidance of the Executive Council.

1.0 Purpose

This procedure is designed to provide appropriate guidance for all agencies operating on the Alaska Land Mobile Radio (ALMR) Communications System with regard to practices for standard channel naming conventions.

The National Coordination Center (NCC), a Federal Advisory Committee chartered by the Federal Communications Commission (FCC) from 1999 to 2003, had identified a need for a standard channel naming convention.[1] In addition to the national naming convention standard, on October 17, 2019, the ALMR Executive Council endorsed the redesign/reallocation of the Incident Command (IC) channels to system and conventional interoperability channels, as proposed by the User Council Talkgroup and Codeplug Subcommittee.

ALMR agencies should program their geographic system and conventional interoperability channels into their radios. At a minimum, the interoperable zone that the agency is physically located in should be programmed into all units. This zone does not replace individual agency talkgroups for day-to-day operational use but should be used for interagency events and larger incidents.

NCC protocol has received wide acceptance within the public safety communications community, as communications interoperability for first responders continues to be a major issue.

Developing standards for day-to-day operations with available resources that would be utilized in the case of a multi-agency, multi-jurisdictional response ensures agencies are better equipped to seamlessly transition to emergency operations.

2.0 Roles and Responsibilities

2.1 Executive Council

The Executive Council (EC) shall be responsible for the management and enforcement of sanctions when violations of the Standard Channel Naming Convention Procedure warrant such action.

2.2 User Council

The User Council (UC) shall be responsible for the formal approval of the Standard Channel Naming Convention Procedure and any substantial revisions hereafter.

[1] NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels Revised June 2017

2.3 Operations Management Office

The Operations Management Office (OMO) should make every effort to keep current on FCC/National Telecommunications and Information Administration (NTIA) advisories concerning changes to standard channel naming conventions, make appropriate recommendations to the User Council for approval, advise the System Management Office (SMO) of changes, and notify agencies of changes and verification of compliance by member agencies.

2.4 System Management Office

The SMO implements any UC-approved changes to standard channel naming conventions, updates the system to reflect approved changes, and advises user agencies of the change.

2.5 User Agency

Agencies operating on the system are responsible for developing procedures to ensure their subscriber units are correctly programmed.

Agencies are also responsible for advising their personnel of the changes and scheduling/conducting any training that may result from such changes.

3.0 Standards

Each FCC-designated interoperability channel in the Private Land Mobile 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:[2]

3.1 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) – Not used for names in six-character format
- **U** UHF band (450 – 470 MHz) – Not used for names in six-character format
- **7** 700 MHz Public Safety Narrowband Voice Band (769 – 775 / 799 – 805 MHz)
- **8** 800 MHz NPSPAC band after the re-banding process (806 – 809 / 851 – 854 MHz) – Not used for names in six-character format.

[2] NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels Revised June 2017

3.2 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 designator has been specified in FCC rules or related orders.

AG Channel is dedicated nationwide for the express purpose of low power, low level (less than 1500' AGL) Air-Ground operations

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 Primarily used 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 licensees, using vehicular repeaters (FCC Station Class MO3).

SAR Channel is primarily used for interagency incident communications for Search and Rescue Operations.

TAC Primarily used for interagency communications by any public safety eligible licensees.

3.3 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) [NOTE: No leading zero used]

10-39 VHF high band (150.8 – 162 MHz)

40-49 UHF band (450 – 470 MHz)

50-89 700 MHz (769 – 775 / 799 – 805 MHz)

90-99 800 MHz "NPSPAC" band (806-809/851-854 MHz) [Post re-banding]

NOTE 1: Starting in VHF high band, channel identifiers are grouped by channel use type, with channel identifiers ending in "0" reserved for interoperability calling use.
NOTE 2: Channel identifiers specified for emergency medical services (MED) in this document are numbered to avoid conflict with the FCC UHF medical channel naming methodology specified in 47CFR90.20(d)(65) and 47CFR90.20(d)(66)(i)

3.4 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.

4.0 Implementation

4.1 Impact

All national interoperability channels (VCALL and VTAC) must be narrowband analog with a transmit CTCSS of 156.7 to be in compliance with the post re-banding/ narrowbanding requirement.[3] These have been incorporated into the new geographic system and conventional interoperability channels along with statewide interoperability channels.

Common Name	Short Name (6 char)	Rx FREQ	Rx CTCSS	Tx FREQ	Tx CTCSS
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

Common Name	Short Name	Rx FREQ	Rx CTCSS	Tx FREQ	Tx CTCSS
National Search & Rescue	NSAR	155.1600	none	155.1600	156.7
State Interop Simplex 1	State 1	155.2500	none	155.2500	156.7
State Interop Simplex 2	State 2	159.2100	none	159.2100	156.7

4.2 Cost

ALMR recognizes there are costs associated with implementation of new channel plans. This not only includes loss of units during upgrade and additional manpower to accomplish the task but may also include additional training requirements for personnel and updating organizational training materials.

ALMR developed cross-reference templates showing the old Regional IC Zones along with the new geographic interoperability channels/talkgroups. The templates are located in the ALMR Concept of Operation and on the ALMR website (https://alaskalandmobileradio.org/ic-zone-interoperability-changes/). Additionally, when agency radios come in for maintenance, etc., they should be reprogrammed at that time.

[3]NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels Revised June 2017

NPSTC recommended the cost of reprogramming communications infrastructure and subscriber equipment, and the cost of generating or revising responder training curriculum and materials to implement the Standard Channel Nomenclature for the Public Interoperability Channels, be specifically designated as allowable grant expenses to facilitate interoperability.[4]

This recommendation was made to the US Department of Homeland Security SAFECOM Program and specifically suggested its Federal Interoperability Grant Guidance be modified to provide for interoperability-related grants. It received unanimous support from the SAFECOM Executive Committee.

The SOA Division of Homeland Security and Emergency Management (DHS&EM) can advise your agency on current grant-eligible items.

5.0 Compliance

Compliance with the Standard Channel Naming Convention Procedure is outlined in ALMR Standard Channel Naming Convention Policy Memorandum 400-10.

[4]NCC / NPSTC Standard Channel Nomenclature for the Public Safety Interoperability Channels Revised June 2017