RADIOREFERENCE.COM

DATABASE ADMINISTRATOR HANDBOOK

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CONTENTS

1. INTRODUCTION

First and foremost, thank you for volunteering your time to be a RadioReference.com ("RR") database administrator. The RR database is the heart of RadioReference.com and your efforts help us maintain a high quality and very valuable resource to our user community. This handbook is intended to outline "everything you need to know" to be an effective RR database administrator. If you have any questions about anything that is not covered in this handbook, just ask. This handbook is intended to be a "living document" so please feel free to suggest additional topics for inclusion.

2. RESPONSIBILITIES

As an RR database administrator, your responsibilities include:

- Following the requirements, guidelines, policies and procedures outlined in this handbook.
- Working as a team with your fellow administrators.
- Regularly logging-in to the RR web site to check the administrator forum and pending submissions.
- Promptly working any incoming submissions.
- Monitoring the "Database Administrator" RR forum.
- Monitoring the "rr_dbadmin" Yahoo Group (e-mail list) for important information and announcements.

3. POLICIES

3.1. PRIVACY POLICY

All administrators are responsible for following the RadioReference.com Privacy Policy. The complete privacy policy may be found on the RadioReference.com web site[1]. *In summary, administrators must never share any personal information about any user with any other person under any circumstances.* Specifically, requests from other users to know "who submitted X" should be politely declined. Furthermore, contact information for any user may not be shared. Any requests for personal information should be redirected to Lindsay Blanton.

3.2. DATA REMOVAL POLICY

Valid and confirmed data of any kind should never be removed from the database. RadioReference.com does not honor requests to remove information unless required by court order. Exceptions to this policy will only be granted by Lindsay Blanton.

3.3. ADMINISTRATOR IDENTITY POLICY

All RR database administrators are required to include their real name, a valid e-mail address and current mailing address in their RR profile.

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[1] http://www.radioreference.com/apps/content/?cid=1

3.4. PROFESSIONAL BEHAVIOR POLICY

All RR database administrators are representatives of the RadioReference.com organization and are expected to exhibit professional behavior in all of their RR-related activities, including forum posts, even when they are not specifically acting in their capacity as an administrator.

4. GETTING STARTED

4.1. FIRST THINGS FIRST

If you are a new database administrator reading this handbook for the first time, please take a moment to post a new thread in the "Database Administrator" forum introducing yourself as a new administrator for your assigned area.

4.2. DATABASE ADMINISTRATOR FUNCTIONALITY

The "Database Admin Home" page[2] is your starting point. As an administrator you have access to this restricted area of the RR database. You will find a link to this page under the "Database" menu at the top of the RR web site. (You may also access administration features from conventional or trunked pages by clicking the "Admin" link in the left-side menu.)

On the "Admin Home" page you will see a list of all submissions for the geographic area to which you have been granted access. You should try to process submissions that are visible to you as soon as possible. If you share administration responsibilities for a geographic area with other administrators, be sure to introduce yourself to your fellow administrators and coordinate your efforts.

On the "Your Queue" page, you will see a list of any submission that you have currently "owned" or have "worked" in the past.

The "New TRS" page may be used to create a completely new trunked system in the database. Please be sure to check that the system does not already exist in the database before creating a new system.

The "Who Manages What" page shows you a list of all database administrators and their areas of responsibility.

4.3. BUGS AND FEATURES

If you encounter a bug or have an idea for a new feature, you should log the issue in the "Mantis" issue tracking system.[3]

4.4. ACCESS CONTROL

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[2] http://www.radioreference.com/apps/dbadmin

[3] http://mantis.radioreference.com/

Each database administrator is granted access to specific portions of the RR database and access within the database is controlled by geographic area. Administrator access to a given portion of the database allows an administrator to directly add, edit and delete information in that portion of database as well as access user submissions within the same geographic area.

"Global" administrators have access to the entire RR database. Non-global administrators may be assigned access to any combination of the areas of the database consisting of the following levels:

- State/province
- County
- Trunked radio system

Please note that state-level administrators do not have access to multi-state trunked radio systems when the system is also assigned to a state to which the administrator does not have access. State-level administrators in this situation must be granted access directly to individual multi-state systems in order to access them.

5. PROCESSING USER SUBMISSIONS

5.1. HOW TO PROCESS SUBMISSIONS

Before processing any submission, first click the "Own" link on or next to the submission. "Owning" a submission is the way that a submission is assigned to an administrator so that more than one administrator does not try to process a submission at the same time.

Once the data has been entered into the database (assuming it meets our criteria for inclusion in the database), the submission should be marked "worked" (i.e., it is complete). Click the "Set Worked" link to mark the submission as complete. You will be prompted to rate the submission ("Poor," "Good" or "Outstanding"). This rating is used to compute an average rating for each user to help evaluate the overall quality of each user's submissions. "Good" is the default. Use "Poor" if the submission is low quality or only partially usable. Use "Outstanding" if the submission is extremely valuable and submitted in an easy way for you to process. If the submission is completely unusable or irrelevant, click the "Reject" link instead of "Set Worked." You must enter a brief explanation of why the submission was rejected.

5.2. USER SUBMISSION HISTORY, RATING AND NOTES

To view a user's submission history and rating, click on the user's username in the submission pop-up window. You will be able to see the user's recent submissions, the average submission rating and notes. You may also look-up a user directly by entering their username in the "Retrieve Username Info" field on the "Admin Home" page. Notes are used for administrators to leave comments for themselves and other administrators about a user. Notes are most commonly used to keep track of users who consistently and/or deliberately submit bad data.

6. DATABASE ORGANIZATION

6.1. GENERAL

The goal of the RR database is to catalog accurate, confirmed data contributed by our vast group of users. *"Unidentified" data is specifically to be excluded from the database.* The database is not intended to be a collection of notes or guesses – please use the forums and wiki for this type of collaboration. Entries in the database do not necessarily have to be specific with respect to their identification (although this is ideal) but they may not be completely unspecified. For example, a talkgroup on a business trunked system is considered "identified" if it is known to be "private security" or "ambulance service" (for example) even though the exact name of the business may remain unknown. "Operations" is not a confirmed description unless "operations" has specific meaning within the scope of the associated agency or business.

6.1.1. INCLUDED DATA

In general, the RR database is intended to include almost all conventional and trunked radio data spanning the 30 MHz to 1 GHz range of spectrum. The following data is specifically intended to be included (this is not intended to be an exhaustive list) except data specifically listed in section 6.1.2 ("Excluded Data"):

- Public safety agencies
    - o Police
    - o Fire
    - o EMS
    - o Emergency management
    - o Local government agencies and services
    - o Homeland security
    - o Federal agencies
    - o Military
- Transportation carriers
    - o Aircraft/airports
    - o Railroads (passenger, freight and tourist based operations)
- Public attractions
    - o Amusement parks
    - o Theme parks
    - o Public parks
- Businesses
    - o Dedicated business land mobile radio services
    - o Shopping malls
    - o Industrial facilities
- Amateur radio
    - o ARES
    - o RACES
    - o Skywarn
    - o Emergency management/homeland security

6.1.2. EXCLUDED DATA

The following data is specifically to be excluded from the RR database:

- Fast food restaurants
- Amateur radio (except the specific cases listed in section 6.1.1 ("Included Data")
- HF (frequencies below 30 MHz) – this information should be included in the relevant area of the RR wiki
- Satellite communications frequencies – this information should be included in the relevant area of the RR wiki
- Miscellaneous "unstructured" data – this information should be included in the relevant "collaboration" area of the RR wiki (which is linked from the database via the "Collaborate" menu option on county and agency pages). "Unstructured" data includes:
    o   Unit numbering schemes
    o   Dispatch codes, 10-codes, status codes, signal codes, disposition codes, terminology
    o   District and patrol zone maps
    o   Channel plans
    o   Fire/EMS station lists
    o   Fire/EMS pager tones
    o   Lists of agencies participating in mutual aid organizations
- Any extraneous information not directly related to radio monitoring, e.g., text and images (including badges, patches, logos, etc.) that provide general information about an agency – please use hyperlinks on the RR wiki collaboration page to refer users to outside sources of related information.
- Any unconfirmed data – do not use the database as a "scratch pad" for miscellaneous notes; please use the forums and wiki for this type of data. License data is not considered confirmed! A press release about a system being planned is not considered confirmed data either.

6.1.3. ABBREVIATIONS

Abbreviations should never be used without first being defined. For example, a trunked system should be named "Southeast Texas Area Radio Network" not simply "STARNET."

Abbreviations should be placed in parentheses after the full name and the abbreviation may be used thereafter. For example, the same trunked system would be named "Southeast Texas Area Radio Network (STARNET)."

Abbreviations should be entered in all capital letters and without any punctuation. For example, "STARNET" should be used, not "S.T.A.R.N.E.T." Except for abbreviations, words should never be spelled in all capital letters anywhere in the database.

Please note the proper capitalization of the following abbreviations which are sometimes capitalized incorrectly:

- kHz – kilohertz (please note the lower case "k")
- MHz – megahertz
- GHz – gigahertz

A single space character should always precede any abbreviation. For example, use "850 MHz" (not "850MHz").

When abbreviating the word "channel" the appropriate abbreviation should be "Ch." and it should be followed by a single space character, e.g., "Ch. 5." Do not use any other abbreviations for "channel" (e.g., "CH 5," "CH-5," "Chan. 5," "F-5").

6.2. CONVENTIONAL DATA

6.2.1. AGENCY PAGES

"Agency" pages are the RR database name for sub-pages that are created either at the state or county level within the RR database's geographically organized hierarchical structure. Agency pages are of one of the following types:

- Public Safety – primarily used for state-level public safety agencies
- Federal – any federal frequencies, excluding military
- Military – any military frequencies
- Attraction – *major* attractions, such as large theme parks or stadiums
- Aircraft/Airport – always create a separate agency page for each unique airport and place all frequencies used on the airport grounds in this agency
- Business – all business frequencies not assigned to another agency (e.g., attraction, utility, railroad)
- Utility – utilities such as electricity and telephone providers
- Railroad – common carrier railroad frequencies (this agency page may only be created at the state-level)

6.2.2. STATEWIDE OR MULTI-COUNTY FREQUENCIES

In general, a frequency with a given usage should never be entered more than once in the database. Exceptions may be made in limited cases where there is region-specific usage information for a frequency that is otherwise a "wide area" use frequency.

Frequencies used by any state agency should be listed on a state-level agency page. State agency frequencies (e.g., state police) should not be entered on a county page (even if the state police frequency is only applicable to one county).

Frequencies that are used across multiple counties within a state should generally be consolidated on a state-level agency page. For example, multi-county mutual aid entities that share frequencies should be entered at the state-level, not on individual county pages. Don't make more work for yourself – if it's used in multiple counties don't enter it separately in each county!

Traditional "common carrier" railroad frequencies should always be entered on a state-level "Railroads" agency page. Again, do not duplicate "wide area" use frequencies on multiple county pages.

6.2.3. COUNTY-LEVEL PAGES

County-level pages are the main pages within the RR database for accessing conventional radio data. All public safety and local government frequencies should be placed on the county page corresponding to the county in which they are used. Separate "agency" pages should not be used for public safety or local government information. All data other than public safety and local government data (e.g., businesses, utilities, airports, attractions, etc.) should be placed on separate "agency" pages under the appropriate county. See section 6.2.4 ("County-level Agency Pages") for more information on the creation of county-level agency pages.

Smaller counties should have a single "category" containing "subcategories" for each logical agency within the county. Larger counties should have several categories (e.g., county, cities, education, etc.) with each containing subcategories for each logical agency. Please see Harris County, Texas, United States in the RR database for an example of how to structure a county page for a large county. Please see Fort Bend County, Texas, United States for an example of how to structure a more typical (smaller) county page.

You should tailor each county page somewhat to meet the needs of each particular geographic area but the general structure and layout of each county page should generally be consistent from county to county. The county government's subcategory should have a high "sort order" value so that it appears at the top of the list in the category. Municipal agencies should have the same sort order value so that they sort alphabetically below the county agency by default (just use the default sort of "99" to keep things simple). The RR database sorts subcategories alphabetically by default so do not specify an explicit sort order unless there is a specific reason to re-order the list. Typically, a frequency with a given usage should never be entered more than once on a given county page (do not create more work for yourself by entering the same frequency in multiple subcategories).

Entities that should appear on the county-level page itself include:

- The county (or parish, etc.) government itself.
- Municipal (e.g., borough, city, town, village, township, etc.) governments.
- Any other miscellaneous municipal agencies, such as utility authorities and independent school districts.
- Universities and colleges.
- Volunteer fire departments and rescue squads.

6.2.4. COUNTY-LEVEL AGENCY PAGES

County-level agency pages should be used for all data other than public safety and local government services. Administrators should use discretion in creating agency pages such that only a reasonable number of agency pages are created relative to the amount of data available in a given county.

Do not create an excessive number of agency pages; use a reasonable number based on the amount of data in the county (e.g., you would not typically create an agency page to put a single frequency on it). In smaller counties, a single "Businesses" agency page should be created for all business frequencies; break out businesses into separate agency pages only in large counties (e.g., Retail, Hospitals, Hotels, Media, etc.).

6.2.5. ADDING AND EDITING FREQUENCIES

6.2.5.1. OUTPUT FREQUENCY

The output frequency field is the main frequency field and should always be included on any conventional database entry. The "output" field should indicate a repeater output frequency or a simplex frequency. Always enter frequencies with all significant digits; never round frequencies.

6.2.5.2. INPUT FREQUENCY

The input frequency field should be used to indicate a mobile transmit frequency used either as a repeater input (type "RM"). *If the "output" frequency is simplex, do not enter anything in the input field.*

Do not include the mobile side of a non-repeated duplex setup in the input field. Two separate frequency entries should be created for non-repeated duplex pairs, one entry for the base (type "B") and another for the mobiles (type "M"). The description of each should clearly indicate whether it is the base or mobile frequency and with which other frequency it is paired. These frequency pairs should be sorted such that they show immediately next to each other with the base frequency listed first.

6.2.5.3.   LICENSE

The "license" field should include the FCC (or relevant foreign agency) license callsign for the indicated frequency if a license is known to exist. If there are multiple applicable licenses, just choose the most relevant license. If the license is expired and there is no newer license, include the most recent expired license. Do not put any other text in this field other than a license callsign.

6.2.5.4.   FREQUENCY TYPES

When adding or editing conventional frequencies, you must specify the "type" which describes how the frequency is used. The types currently supported by the RR database are:

- R – Repeater
- B – Base
- M – Mobile
- F – Fixed

One or more "types" should be indicated for each frequency entry. The most common entries in the type field are:

- "RM" – indicating a repeater and mobiles/portables
- "BM" – indicating a base station and mobiles/portables (simplex only)
- "B" – indicating a simplex base station only
- "M" – indicating mobiles/portables only
- "F" – indicating fixed transmitters, e.g., fixed telemetry transmitters or point-to-point RF links

6.2.5.5.   FREQUENCY TONES

Subaudible tones and codes are commonly used for to help reduce interference from other users of the same frequency. The "tone" field in the RR database provides a location to capture this information. The RR database supports the following types of "tones:"

- Carrier squelch, i.e., no tone, entered as "CSQ"
- Continuous Tone Coded Squelch System (CTCSS), a subaudible tone frequency in Hz, entered in the format "156.7 PL"
- Digital Coded Squelch (DCS), a decimal code, entered in the format "032 DPL"
- Project 25 Network Access Code (NAC), a hexadecimal code, entered in the format "293 NAC"

6.2.5.6. FREQUENCY MODES

When adding or editing conventional frequencies, you must specify the "mode" in which the frequency is used. If multiple modes are used on a given frequency, create a separate frequency entry for each mode with an appropriate description.

The modes currently supported by the RR database are:

- 1 – FM, frequency modulation analog voice
- 2 – P25, Project 25 digital voice
- 3 – AM, amplitude modulation analog voice
- 4 – FMN, narrowband frequency modulation analog voice
- 5 – Telm, data
- 6 – TRBO, digital voice ("MOTOTRBO")
- 7 – NEXEDGE, digital voice

6.2.5.7. SORT

The "sort" field should be used to organize frequencies with a subcategory in a logical manner. In general, sorting by "sort order" is usually most appropriate. In some cases, sorting by "description" may be more appropriate (usually in non-public safety subcategories). You may control how sorting is done by clicking the "Edit Subcategory" link and changing the "Sort by" setting.

In general, public safety and governments services subcategories should be sorted in the following order:

1. Police
2. Fire
3. EMS
4. Public works and other services
5. Telemetry/data

In general, business subcategories should be sorted alphabetically by description.

6.3. TRUNKED DATA

6.3.1. GENERAL

Conventional frequencies used in conjunction with a trunked radio system should be entered in the database on the appropriate county (or if applicable, agency) page in the RR database. You should link the corresponding trunked system to the subcategory by using the subcategory trunked system link.

Never combine more than one logical system as a single system entry in the RR database. Just because a system is licensed to the same operator does not mean the sites are networked. Only systems that are known to be networked together should be included as a single system in the RR database. "Hard" talkgroup patches between one or more system are not considered "networked" for the purposes of the RR database.

All trunked systems in the RR database are automatically assigned a unique ID ("sid"). Please note that the "sid" value is not the same as a trunked system's "system ID" (if it has one).

6.3.2. SYSTEM DISPLAY MODES

The RR database supports several system display modes. The display mode is set under the "General Information" section when editing a trunked system. The available modes are:

- **Normal Display** – self-explanatory
- **Staged** – this is the default mode when creating a new trunked system. "Staged" trunked systems are only viewable by administrators.
- **Depreciated** – this status is used to "delete" a trunked system. "Depreciated" trunked systems are not normally visible in the database but may be returned in search results.
- **Policy - No Display** – this status indicates that a previously created system has been blocked due to a data removal request. This status is no longer used under the current data removal policy.

6.3.3. SYSTEM NAMES

Public safety trunked systems should generally be named after the primary jurisdiction (e.g., county) that the system covers or by the primary agency operating the trunked system. If a system has a specific "brand name" assigned (e.g., "Southeast Texas Area Radio Network") then the specific name should always be used. If the "brand name" of the system ends with the word "system" then do *not* exclude the word "system" from the system name.

In the case of business trunked systems, always use the "doing business as" (DBA) name, not the legal business name. In other words, the system should be identified by the common name that would be generally recognized by the public. If the "DBA" and legal name are the same, or if the legal name is the only known name, do not include extraneous suffixes such as "LLC" or "Inc." unless they are used as part of the common name (these suffixes indicate the legal status of the business and are not relevant in the RR database; legal names are typically found on the license if someone is interested in that detail).

System names should always be unique to the extent possible. It is common to have a number of trunked systems operated by a single business so for these systems the name should include unique identifying information in parentheses at the end of the name. Use the minimum amount of information to uniquely identify the system (e.g., geographic location, frequency band, type of system, etc.). When these options are exhausted systems may be arbitrarily numbered sequentially beginning with 1.

Here are some example system names:

- ABC Communications (Houston 460 MHz LTR)
- ABC Communications (Houston 850 MHz LTR)
- ABC Communications (Houston Motorola)
- XYZ Communications (San Antonio)
- XYZ Communications (Austin #1)
- XYZ Communications (Austin #2)

6.3.4. TALKGROUP CATEGORIES

Talkgroups should be logically grouped into categories that make sense based on the usage of each trunked system. Small systems need only have a single talkgroup category and this category should be named "All" (i.e., to display as "All Talkgroups" in the user interface).

6.3.5. ADDING AND EDITING TALKGROUPS

6.3.5.1. TALKGROUP MODE

Talkgroup "mode" indicates whether the talkgroup is used in analog or digital mode and whether or not encryption is used. The valid options for talkgroup mode are:

- A – Analog
- D – Digital
- M – Mixed (analog and digital)
- X – Analog and encrypted (this indicates that when the talkgroup is not encrypted that the talkgroup uses analog voice)
- E – Digital and encrypted

Only one mode should be entered for a given talkgroup. Encryption modes should be used to indicate talkgroups which regularly use encryption whether or not encryption is believed to be used full-time.

6.3.6. SYSTEM-SPECIFIC INFORMATION

6.3.6.1. PROJECT 25

Project 25 sites are grouped into zones. Project 25 trunked systems should have the corresponding one or more zones created in the RR database and sites assigned to the appropriate zone. Please note that most scanners report zone and site ID together as combined site or "tower" ID. Furthermore, scanners are not consistent with respect to reporting the combined zone/site ID in hexadecimal or decimal format. Please be sure that you know whether the submissions you are working are referring to decimal or hexadecimal zone/site numbers.

System IDs should be entered in hexadecimal format. WACNs should be entered in hexadecimal format.

6.3.6.2. MOTOROLA

Be sure to create separate systems in the RR database for each unique Motorola trunked system. Unless a system is confirmed to be OmniLink, a system should never have more than one system ID assigned.

For OmniLink systems, each OmniLink zone is represented by a Motorola system ID and that system ID should be created as a zone in the RR database.

System IDs should be entered in hexadecimal format.

6.3.6.3.   EDACS

EDACS talkgroups may be entered or imported in either decimal or AFS format. Please use the appropriate field corresponding to the format of the talkgroup that you are trying to enter. You should only enter the talkgroup in one format or the other, not both.

6.3.6.4.   LTR

Standard LTR systems by definition are single-site only and each should each be entered as a separate system in the RR database.

Standard LTR talkgroups should be entered and imported without the dash ("-") characters in the decimal talkgroup field, e.g., the talkgroup "1-05-101" should be entered or imported into the decimal talkgroup field as "105101."

Standard LTR systems should never have a logical channel number (LCN) greater than the maximum number of 20.

6.3.7. LOGICAL CHANNEL NUMBERING

For unused logical channels numbers (LCNs) in system types such as EDACS and LTR, enter "0.0" for the frequency. "0.0" creates a placeholder that will cause the particular LCN position to be displayed as "N/A" in the database user interface. It is not necessary to enter placeholder entries for LCNs above the highest known used LCN in the site.

Logical channel numbers should always be greater than zero and less than or equal to the maximum number of channels possible in a single site depending on the characteristics of the particular system type.

Always indicate whether frequencies for an LCN-based system are confirmed or unconfirmed. Create separate sites within each system for confirmed LCNs and unconfirmed LCNs – never mix both in one site. If the system is a single-site system, then site 1 should be "Confirmed LCNs" and site 2 should be "Unconfirmed LCNs" (if applicable). If the system is a multi-site system, then indicate in the site notes whether or not the LCNs are confirmed for that site. Always be sure to remove any unconfirmed LCNs from an unconfirmed LCN site once the LCNs are confirmed.

6.3.8. CONTROL CHANNELS

For system types which use dedicated control channels, the frequencies that are used as control channels may be designated in the database. A trunked site frequency may be marked with a "d" character to indicate it is a primary control channel. When confirmed information is obtained regarding which channels are designated as alternate control channels, they may be indicated by using an "a" character instead of "d." In general, the "d" character should always be used to denote a control channel unless specific information is available regarding alternate control channels.

6.4. ALPHA TAGGING

6.4.1. GENERAL

Alpha tags are limited to 12 characters to ensure compatibility with older scanners that support only a 12-character alpha tag. Alpha tags should be made as clear as possible given the space provided. Alpha tags should generally indicate the agency and the channel number or usage to the extent that the information is known and can be reasonably fit in 12 characters. Alpha tags should use a mix of lower and upper case letters (the use of all capital letters should be avoided). Alpha tags should not necessarily be the alpha tag as shown on a radio transceiver programmed for a specific conventional or trunked system. Alpha tags should be written to be useful to scanner users and furthermore they should be clear to novice scanner users to the extent possible.

If the frequency or talkgroup description is insufficient to provide enough information to create a unique alpha tag, then the frequency or talkgroup number should be included as part of the alpha tag to ensure uniqueness.

6.4.2. STANDARD ABBREVIATIONS

- AC – Animal Control
- Car – Car-to-Car
- Dsp – Dispatch
- Disp – Dispatch
- E – East
- EMS – Emergency Medical Services
- FD – Fire Department
- FG – Fireground
- N – North
- NE – Northeast
- NW – Northwest
- Ops – Operations
- PD – Police Department
- PW – Public Works
- S – South
- SD – Sheriff's Department
- SE – Southeast
- SO – Sheriff's Office
- SW – Southwest
- TA – Talk-Around
- Tac – Tactical
- VFD – Volunteer Fire Department
- W – West

6.5. FUNCTION TAGGING

6.5.1. GENERAL

Function tagging allows frequencies and talkgroups to be placed into general category-based groups. Do not be concerned that the wording of the function tag names does not exactly match what you believe to be the use of

the frequency or talkgroup. Function tags should enable novice users to easily "filter" the frequencies or talkgroups for which they are searching.

6.5.2. FUNCTION TAGS AND DESCRIPTIONS

- **Aircraft** – For civilian aircraft and air traffic control operations most typically in the 118-136 MHz and 225-380 MHz bands in AM mode.
- **Business** – For most business related entities not covered by other tags. Please note that the following tags override the "Business" tag and should always be used instead when they are applicable: Media, Railroad, Security, Transportation and Utilities.
- **Correction**s – For jail/prison operations and other corrections activities, including federal prisons.
- **Data** – For data, paging, telemetry and most non-voice operations.
- **Emergency Ops** – For Emergency Operation Centers and similar emergency management or disaster-related operations.
- **EMS Dispatch** – For EMS dispatch (including Rescue Squads).
- **EMS-Tac** – For EMS on-scene communications, tactical operations and secondary channels. Please note that EMS-to-Hospital communications should be tagged with "Hospital."
- **EMS-Talk** – For EMS talk-around, car-to-car and supervisor operations.
- **Federal** – For all federal government operations (except corrections, traditional law enforcement patrol and fire/EMS operations which should be tagged using the more appropriate tags).
- **Fire Dispatch** – For fire dispatch, including combined fire/EMS dispatch.
- **Fire-Tac** – For fireground, tactical and on-scene communications, including combined fire/EMS operations.
- **Fire-Talk** – For fire talk-around and car-to-car operations, chiefs, supervisors, etc., including combined fire/EMS operations.
- **Ham** – For any amateur radio assignment. Please note that only specific amateur radio frequencies are to be included in the RR Database; see section 6.1.1 ("Included Data") for details.
- **Hospital** – For EMS-to-Hospital communications and patient reports (e.g., "Med" or "HEAR" channels). Please note that hospital operations, maintenance, etc. should be tagged with "Business."
- **Interop –** Interoperability communications, cross-agency communications, mutual aid, etc.
- **Law Dispatch** – Law enforcement dispatch.
- **Law Tac –** Law enforcement tactical, SWAT, on-scene, surveillance and specific sub-agency communications.
- **Law Talk** – Law enforcement talk-around, car-to-car and supervisor operations.
- **Media** – Newspapers, television and broadcast radio operations (most commonly in the 450/455 MHz and 161 MHz bands).
- **Military** – All military operations, e.g., range control, air-to-air combat, etc. Military law, fire and EMS should be tagged with the appropriate law, fire or EMS tag.
- **Multi-Dispatch –** For combined law enforcement and fire/EMS dispatch.
- **Multi-Tac** – For combined law enforcement and fire/EMS tactical and on-scene communications.
- **Multi-Talk** – For combined law enforcement and fire/EMS tactical talk-around and car-to-car operations.
- **Other** – Anything not covered by the other tags. *Note: This tag should rarely – if ever – be used, so in general pretend like it does not even exist*. Administrators sometimes incorrectly use the "Other" tag on frequencies and talkgroups that should be labeled "Public Works."

- **Public Works** – Public agency non-public safety communications. This includes any non-public safety government services, such as trash, streets, roads, sewer, zoos, administration, maintenance, animal control, community initiatives, code compliance, etc. Please do not use the "Other" tag for government services. Exceptions: Public transportation and government security services should be tagged with "Transportation" or "Security" respectively.
- **Railroad** – All common carrier railroad communications.
- **Security** – Non-law enforcement security operations, including private security companies, non-commissioned government agency security, school security, etc.
- **Schools** – School-related communications (schools, school buses, football games, etc.). Exception: Security should be tagged with "Security" and law enforcement should be tagged with the appropriate law enforcement tag.
- **Transportation** – Public and private bus, taxi and public passenger rail (isolated rail systems not connected to a common carrier railroad network) communications (except school buses).
- **Utilities** – Private electric, water, natural gas, phone, cable TV, etc. operations. Note: Utility services provided by a government agency should be tagged with "Public Works."

6.6. GEOGRAPHIC TAGGING

Geographic tagging of conventional frequency subcategories and talkgroup categories is used to indicate the "service area," e.g., a city center point and diameter (representing a circle to approximate the area of the city) – not necessarily the actual area of radio reception. The purpose of geographic tagging is to facilitate location-based scanner programming, i.e., if a person is physically located in a city then they would want to scan the frequencies for the city that they are in, not the adjacent city which they might also be able to hear.

Geographic tagging of trunked system sites is used to indicate the location of the site and the approximate coverage area of the site (represented by a circle centered on the site).

Geographic data (latitude, longitude and radius) should be assigned to conventional frequency subcategories, talkgroup categories and trunked system sites. Do not simply copy FCC license data to fill-in this information (unless the latitude and longitude happen to be correct on the license).

7. REVISION HISTORY

1.0. March 22, 2009 – Initial version.

1.1. March 28, 2009 – Revised conventional frequency subcategory sort convention, revised non-repeated duplex frequency pair entry convention, added "Corrections" tag, added common abbreviations, added system ID and WACN should be entered in hexadecimal format, clarified geographic tagging of trunked system sites, clarified entering and importing of LTR talkgroups.

1.2. April 18, 2009 – Added "logical channel numbering" section, added "always include 'system' if system name ends with that word," added standard "channel" abbreviation, added "use all capital letters for abbreviations only," added clarification of the use of the "Hospital" tag, made minor formatting changes, made minor clarifications related to the RR 4.0 release, added explanation of how to mark control channels, revised the "included data" and "excluded data" sections to reflect the move of unstructured data to the wiki, removed the "10-codes and unit lists" section, added "access control" section.