

NEBRASKA STATEWIDE RADIO SYSTEM ROC TRAINING PRESENTATION



Office of
Chief Information Officer
Public Safety
Communications

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Good Life. Great Vision.

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What is the SRS?



- Two master switches: Lincoln and Kearney
- DSR (dynamic system resilience)
- 65 VHF towers networked to two master controllers on a closed secure network (including one mobile site)
- VHF mobile-coverage radio system
- Digital P25 radio standard
- Trunked (Statewide roaming)

Who owns and maintains the network?



OCIO and NPPD:

- Joint ownership and maintenance
- System Administrative Group (SAG): OCIO Public Safety and NPPD Telecommunications Team
- System Operating Group (SOG): The State Chief Information Officer and the NPPD Telecommunications Administrator
- System User Group (SUG): All agencies using the system (local, state, federal, & public)

Who are the system users?

3000+ Full-Time Users:

- State Agencies
- Federal Agencies
- Local Agencies
- Public Utilities
- Railroad Police
- Hospitals & Health Departments



State Agency Users:

State agencies that use statewide radio communications:

- State Patrol
- State Fire Marshall
- Nebraska Game and Parks Commission-Law Enforcement Div.
- Department of Corrections
- Department of Transportation
- Department of Revenue
- Nebraska Brand Committee
- NE Emergency Management
- Department of Insurance
- Dept. of Health & Human Services
- Department of Agriculture
- Department of Motor Vehicles
- Adult Probation/Supreme Court
- National Guard
- Nebraska Electrical Board





Nebraska National Guard 72nd Civil Support

UNIFIED COMMAND SUITE - Concept of Operations



Multi-Team
Communication



Outside Agencies for
Reach-Back Communications



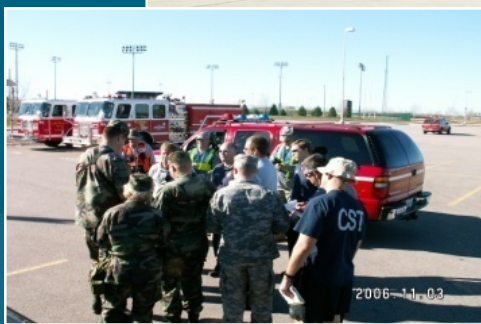
Command Post



Other DOD/ Federal/ State/
Local Agencies / Assets



CST
Command Post



Federal Agencies:

- FBI, IRS, and UPS
- US Marshall Service
- Alcohol, Tobacco, Firearms, and Explosives
- US Fish & Wildlife
- USAF OSI (Air Force Office of Special Investigation)
- USAF CAP (US Air Force Civil Air Patrol)
- DOJ DEA (Drug Enforcement Administration)
- DOI NPS (National Park Service)
- DHS FPS (Federal Protective Services)
- USFS (Forest Service)
- USHHS (Health & Human Services)
- US Dept. of Homeland Security/NPPD/CS&C/OEC



Railroad Police:



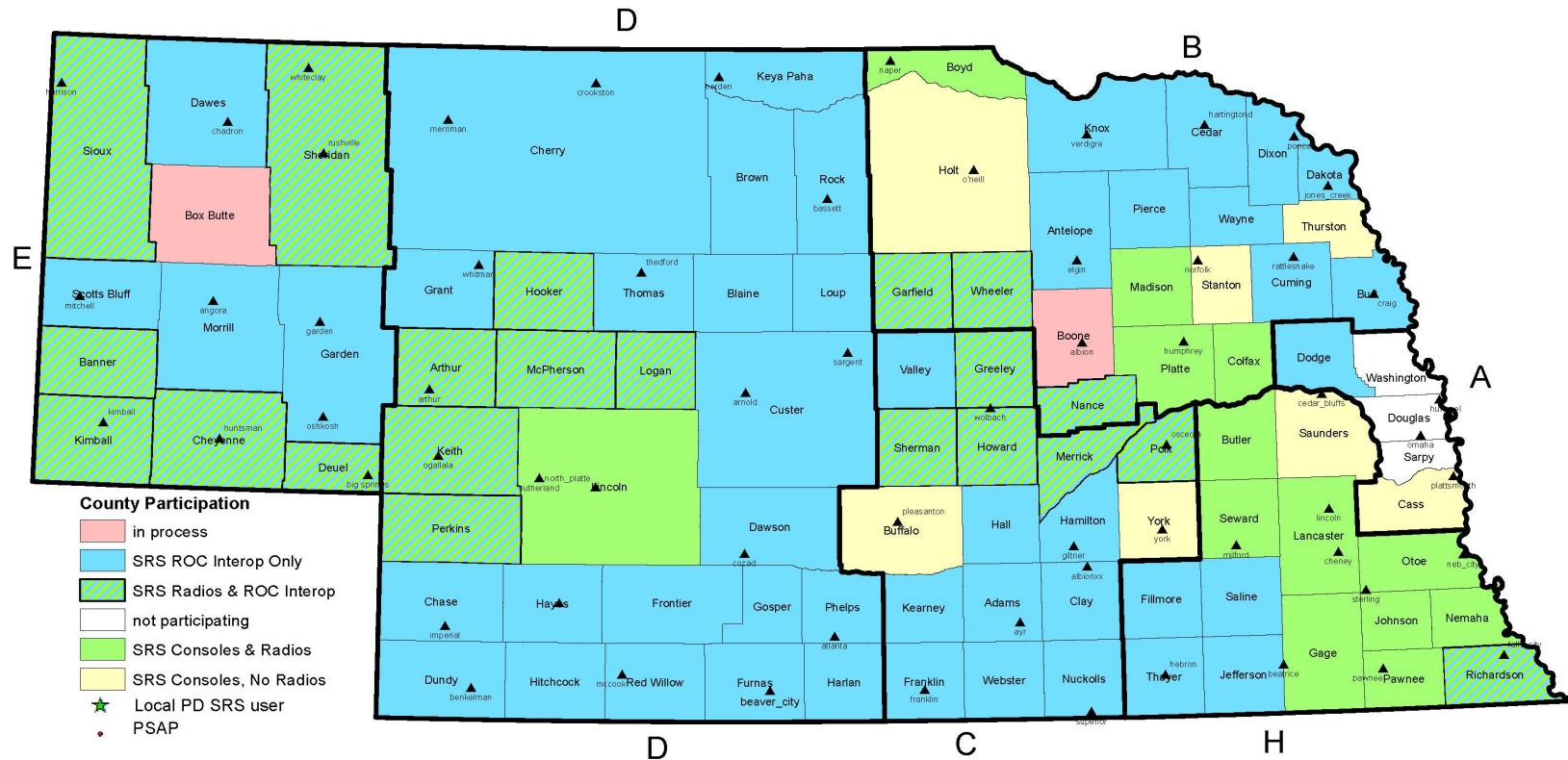
- Nebraska Public Power District
- Lincoln Electric System
- Burt County Public Power District
- Union Pacific Railroad Police
- BNSF Railroad Police



Nebraska Statewide Radio System

Local Agency Implementations:

Nebraska Statewide Radio System (SRS) Implementations



Interoperability Across the State:

All 3000 + of these SRS users have the ability to talk to each other on shared talk groups that are required in every SRS user radio:

- Regional Operations Common (ROC) Talk Groups
- 16 Assignable EVENT (EVNT) Talk Groups
- LE (Law Enforcement) Talk Groups: LE1, LE2 and Encrypted LE3



VHF National Interoperability Frequencies:

Channel Type	Channel Name	Eligible Users	RX Freq	TX Freq	TX Tone	Mode
Simplex	VCALL10	All Public Safety	155.7525	155.7525	156.7	Analog
Note: VCALL is reserved for monitoring and remains silent, except for making initial contact. Users should be directed to a working channel as listed below.						
Simplex	VTAC11	All Public Safety	151.1375	151.1375	156.7	Analog
Simplex	VTAC12	All Public Safety	154.4525	154.4525	156.7	Analog
Simplex	VTAC13	All Public Safety	158.7375	158.7375	156.7	Analog
Simplex	VTAC14	All Public Safety	159.4725	159.4725	156.7	Analog



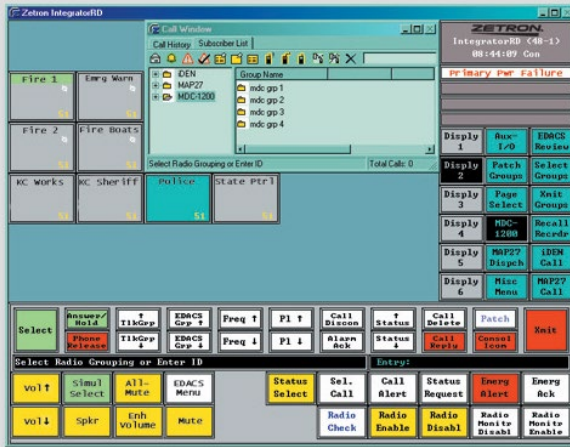
So... How does your
agency communicate with
those 3000+ SRS users?

A consolette has been installed at
your dispatch center that operates
directly on the SRS....

It can be connected
to your radio
console...

Console User
Interface

Console back-room electronics



Consolette®

...or it can be installed as a
stand-alone radio near
your radio console



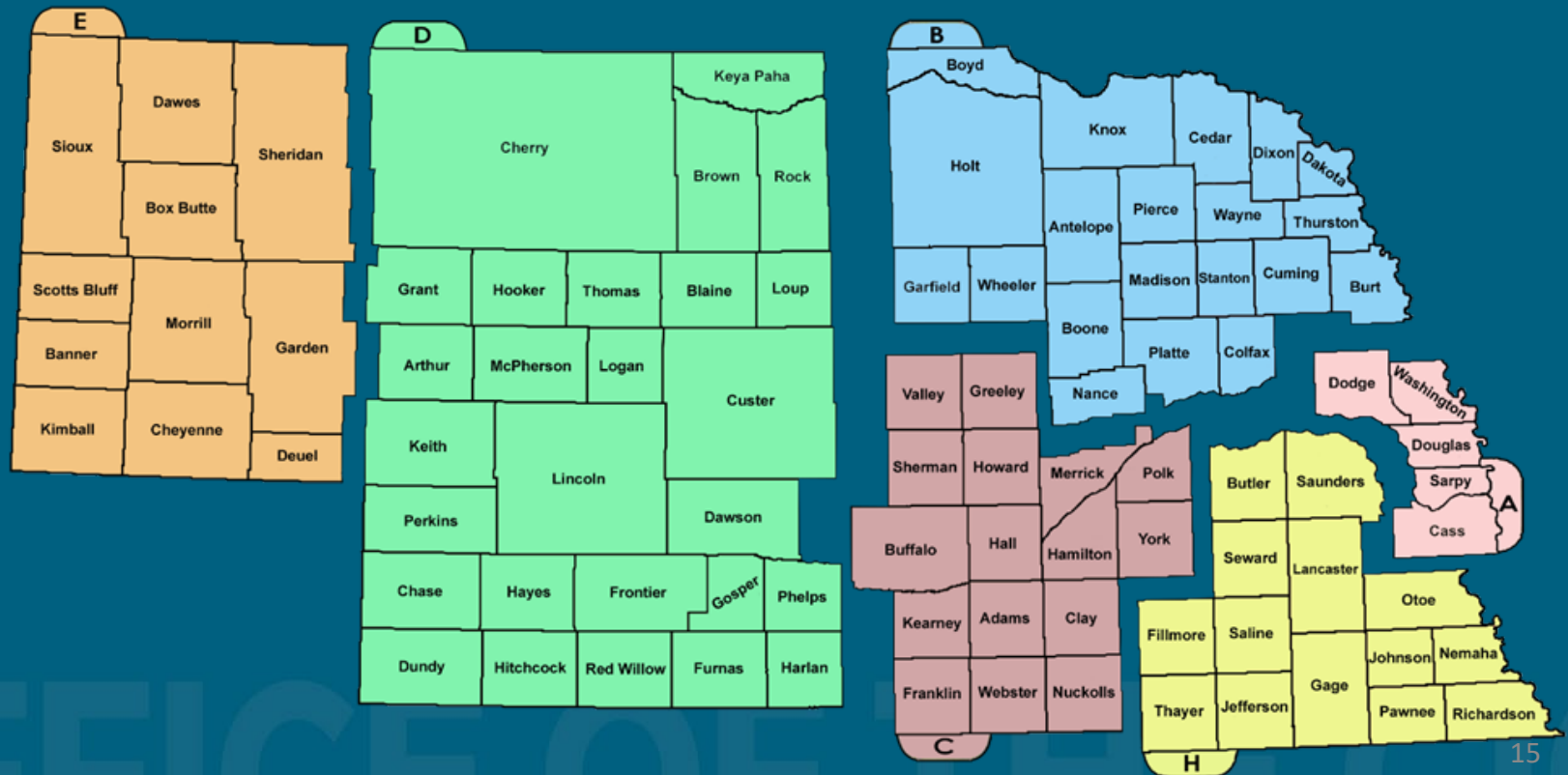
Consolette®

Interoperability Plan:

ROC Talk Groups:
Regional Operations Common Talk Channels (based on Patrol troop areas)

H ROC CALL, H ROC1, H ROC2

B ROC CALL, B ROC1, B ROC2 Etc.



User Definitions:

SRS User:

The SRS is the agency's main radio system for daily operations. They have all the interoperability talk groups in their dispatch centers and their radios PLUS their own proprietary agency talk groups that can be encrypted. They pay a monthly subscription fee for SRS usage.

Non-SRS User:

An agency that has their own radio system for daily operations. The only SRS talk groups they have are the ROC talk groups in their dispatch center, used for interoperability with SRS users and other dispatch centers with ROCs. This agency does NOT have radios subscribed to the SRS and does NOT pay an SRS subscription fee.

ROC Talk Group Basics:

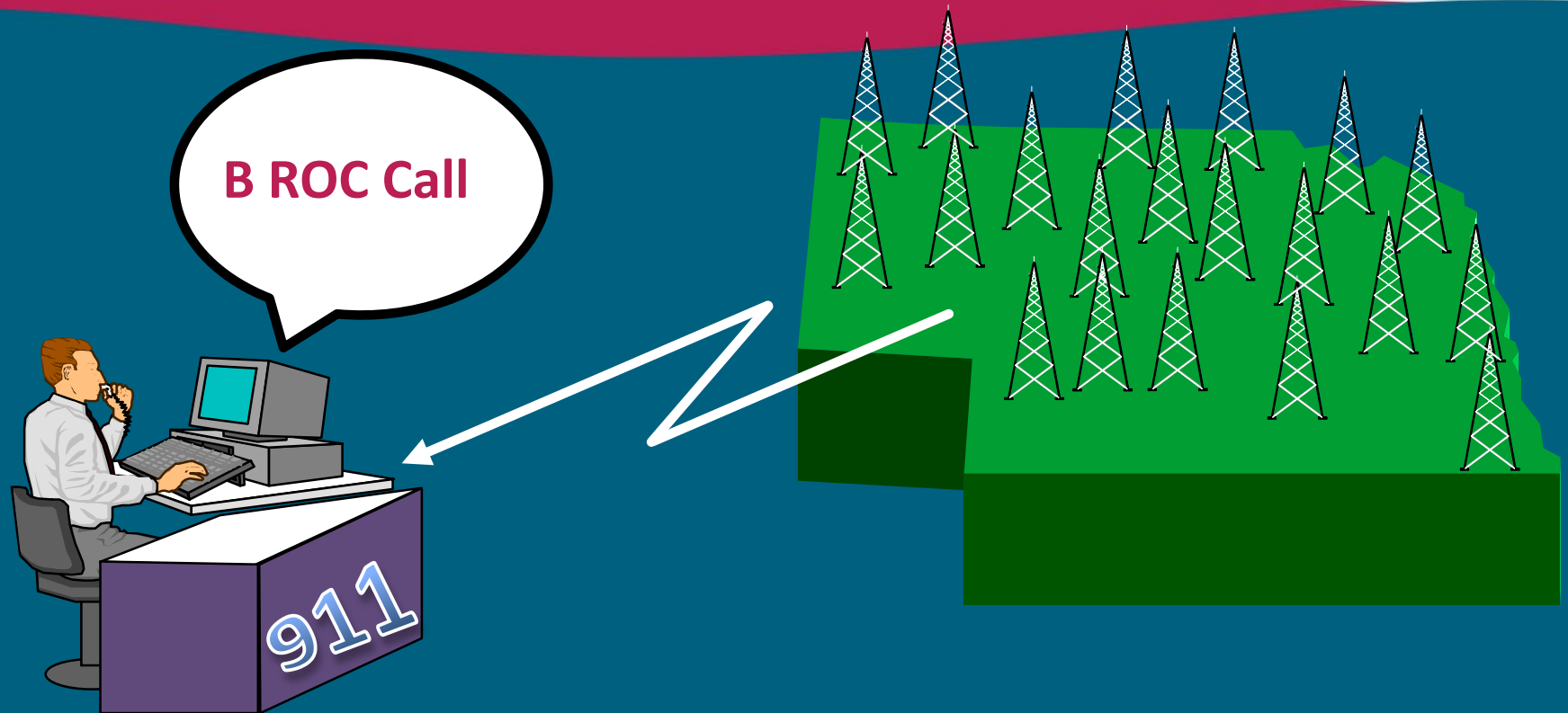
- Designed specifically for interoperability between SRS users and non-SRS users
- Each region has at least one CALL talk group (ROC Call) and two tactical talkgroups (ROC 1 & ROC 2)
- Creates an intercom system: all users on the same ROC talk group can hear each other
- If you have the ROC's, you can initiate a call on them

**You do not need permission to use them.
Please follow the standard ROC protocol.**





Where are ROC Talk Groups:

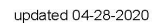


ROC talk groups at local dispatch centers

(Also in all state dispatch consoles, all state radios, and all local radios that are subscribed to the SRS.)

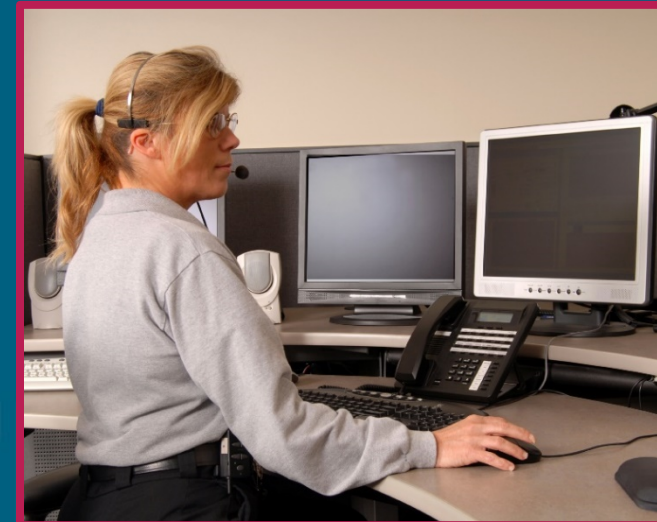
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Norfolk PD dispatches Stanton County



ROC Talk Group Basics:

- State dispatchers have all the ROC talk groups in their consoles and monitor the ROC CALL talk groups.
- SRS users have the ROC talk groups in their portables and mobiles but do not monitor them.
- ROC plan is dispatch-centric. ROC calls should be initiated through a dispatcher.



- SRS consolettes can only do one thing at a time, so always have back-up protocol for a second incident or event requiring interoperability with another SRS ROC agency.







TRAINING POINTS:

- When pushing-to-talk, dispatchers need to wait a second before speaking or the first few words they speak will not be heard. For example: the other end could hear “shoot” instead of “don’t shoot!”
- If patching is used for non-SRS users, dispatchers will hear the SRS push-to-talk tones but field personnel will not.





Trunking Status Tones:

Tone Name		Tone Information
Out of Range		Radio is out of range of the system
Power-up		Radio has successfully powered on
Prohibit		Talkgroup or channel is not accessible
System Busy		Channel, system or target radio is busy
Talk Permit		Channel is ready to use
Time-Out Warning		Talk time has been exceeded

ROC Talk Group Protocol:

- 7 days-a-week/24 hours-a-day dispatch center monitoring of the ROC CALL talk group for the region in which your dispatch center is located
- ROC CALL is for initiating contact with another ROC CALL dispatch agency (state or local agency)
- Move to ROC 1 or ROC 2 to continue the conversations after the initial contact
- **Do not carry on operations on ROC CALL. It is for initial contact only.**
- **Exceptions — weather warnings, wide area public safety alerts, lookout alerts, etc.**



More ROC Talk Group Protocol:

- Identify yourself, the party you are calling, and the talk group you are calling on.
- BEFORE you change talk groups, identify the talk group you are moving to.
- See sample scripts at the end of this presentation for detailed examples.
- Use clear speech. You can't assume all SRS users understand 10 Codes!
- 10 Codes can mean different things to different agencies. The national standard is clear speech.



Three Levels of ROC Interoperability:

Patch:

Join your field personnel to a ROC talk group so your field personnel can talk directly to SRS users.

Multi-Select:

Your field personnel can hear you, but not the other side of the communication.

Dispatcher Relay:

Your field personnel cannot hear either side of the ROC communication. Dispatchers will need to relay messages to their field personnel.

Weekly ROC Roll Call:

Day Shift:

- Performed most every Thursday (except holidays) around 10 a.m. Central time by OCIO Public Safety staff
- All dispatch centers in every ROC region are called upon and expected to respond

Swing Shift and Night Shift:

- Performed by volunteers from various dispatch centers
- Occurs weekly on any day and any time during the shift
- OCIO provides the script and check list

**OCIO follows up on non-responders
with a phone call or email**

ROC Talk Group Scenarios:

Car Crash Scenario:

NSP-H ROC Call: “NSP Lincoln to Seward on H ROC Call”

Seward-H ROC Call: “Go ahead NSP Lincoln”

NSP-H ROC Call: “Have report of a vehicle accident on Hwy X and County Road Y.
Switch to H ROC 1 and go ahead.”

Seward-H ROC Call: “Seward going to H ROC 1” *(NSP H and Seward PD go to H ROC)*

NSP-H ROC1: “NSP requests two units for traffic control.”

Seward-H ROC1: “Seward units responding will be 272 and 119.”

NSP-H ROC1: “Trooper 567 arrived on scene and advised the vehicle is off the
roadway in the south ditch, no injuries. Please cancel units.”

Seward-H ROC1: “Copy, Seward clear on H ROC 1. Moving back to H ROC Call <time>”

NSP-H ROC 1: “Patrol Clear on H ROC 1, going back to H ROC Call <time>”
(Seward PD and NSP-H return to H ROC CALL.)

Seward-H ROC Call: “Seward back on H ROC Call <time>”

Test Script: Call Same ROC CALL TG:

Agency A Dispatch: "Agency A calling Agency B on X ROC CALL for a test."

Agency B acknowledges you.

Agency A Dispatch: "Advise signal."

Agency B responds.

Agency A Dispatch: "Agency A clear on X ROC Call <time>"



Test Script: Call Different ROC CALL TG:

Scenario: Dispatcher in Agency A, X ROC CALL wants to talk to Y ROC CALL.

Agency A Dispatch: "Agency A going to Y ROC CALL."

You select the Y ROC CALL talk group in the neighboring region.

Agency A Dispatch: "Agency A calling Agency B on Y ROC CALL for a test."

They acknowledge you.

Agency A Dispatch: "Advise signal."

They respond.

Agency A Dispatch: "Agency A is clear on Y ROC Call. Going back to X ROC Call <time>"

Agency A goes back to X ROC CALL and announce: "Agency A now back on X ROC CALL <time>"

Patching Your Frequencies to ROC TG's: **NEBRASKA**

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- Announce to all parties that you are going to patch them together and to standby for the patch.
- Set up the patch.
- Announce that the patch has been created and to go ahead.
- If multiple parties are involved, each user should identify himself/herself at the beginning of each communication.
- Announce to all parties involved when you are going to take down the patch before you take it down.



Practice, Practice, Practice:

- The ROC Interoperability Plan is used across the state.
- Your proprietary radio system continues to operate as it always did. The ROC plan does not replace or change it.
- The ROC Plan adds a new resource and new capabilities.
- Plan out your agency scenarios with other ROC Plan users and role play the scenarios.
- Schedule practices with other ROC users.
- Get used to waiting for the permit tone before speaking.
- Get used to announcing the talk group you are on, going to, or clearing, and the talk group you are returning to.



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Please let us know how we can assist!

