

METROPOLITAN EMERGENCY SERVICES BOARD

RADIO TECHNICAL OPERATIONS COMMITTEE AGENDA

Board Room, Metro Counties Government Center

May 24, 2017

1:00 – 3:00 p.m.

MEMBERS:

Scott Haas, Chair
Scott County

Ron Jansen, Vice Chair
Dakota County

Jake Thompson
Anoka County

Tim Walsh
Carver County

Rod Olson
City of Minneapolis

Jon Eckel
Chisago County

John Gundersen
Hennepin County

Bob Shogren
Isanti County

Jeff Bjorklund
Metropolitan Airports
Commission

Chad LeVasseur
Metropolitan Council

Scott Gerber
MN Fire Chiefs Association

Dave Pikal
Ramsey County

Chuck Steier
U of M Police, at large
member

Nate Timm
Washington County

Open
Metro Region EMS

Open
MN Chiefs of Police
Association

1. Call to Order
2. Approval of March 2017 Minutes
3. Agenda Items
 - a. COML Packet – Charles Sloan III (HCMC EMS)
 - b. CRAE installation of 8TAC91 at Princeton H.S. - Fjerstad
 - c. Metro Standard 3.23.0 – Connecting to the 800MHz System (Sunset) - Tretter
 - d. Metro Standard 3.7.0 – Recording of Interoperability Talkgroups - Tretter
 - e. Metro Standard 3.13.0 – Nationwide 800MHz Conventional Interoperability Channels - Tretter
4. Moves, Additions & Changes to the System
 - a. Update on Removal of Voting from Interoperability System – Jansen
5. Committee Reports
 - a. Metro Mobility System Usage Update—Chad LeVasseur/Dana Rude
 - b. System Manager's Group/Metro Owner's Group Update – Jansen
 - c. Reports from SECB Committees
 - i. Steering - Tretter
 - ii. OTC – Gundersen / Timm
 - iii. Interoperable Data Committee – Olson / Thompson
 - iv. IOC –Thompson / Kummer
 - v. IPAWS – Haas / Williams
 - vi. Finance / Grants Workgroup- Tretter
 - d. Super Bowl 52 Communications Workgroup - Olson
6. Other Business
 - a. Regional Talkgroup Permissions Requests
 - b. Next Meeting June 28th
7. Adjourn

Scott Haas, Chair

**Metropolitan Emergency Services Board
Radio Technical Operations Committee
Meeting Notes
March 22, 2017**

Members Present:

Rod Olson, John Gundersen, Dave Pikal, Jon Eckel, Chuck Steier, Jake Thompson, Scott Haas, Nate Timm, Chad LeVasseur, Scott Gerber, Ron Jansen, Peter Sauter, Chris Kummer.

Guests Present:

Steve Oruadnik; MN DOC, Peter Sauter; Carver County, Charles Sloan III; Hennepin County Emergency Management, Dan Anderson; HCEM, Rick Juth; ECN, Jim Schnoor, Federal Reserve, Dana Rude; Metropolitan Council, Dan Nohr; Motorola, Troy Tretter, Jill Rohret; Metropolitan Emergency Services Board

Call to Order:

Scott Haas called the meeting to order at 1:05 P.M.

Ron Jansen asked to add a request from Dakota County to the agenda for LTACs in three radios as a waiver to state standard 3.19.0 for three people on the SWAT team. Item was added to the agenda as 3.h.

Rick Juth asked that Communications Case Studies be added under Other Business. Item was added to Other Business

M/S/C Motion made by Ron Jansen to approve the March 22, 2017 agenda with the above modifications. Jon Eckel seconded. Motion.

M/S/C Motion made by Ron Jensen to approve the February, 2017 minutes as amended. Thompson seconded. Motion carried.

Agenda Items:

City of Minneapolis Participation Plan Amendment

Rod Olson said the City of Minneapolis is requesting a second console site at the MSO.

M/S/C Motion made by Gundersen to approve request to add a second console site at the MSO. Jansen seconded. Motion carried

COML Packet- Dan Klawitter

Troy Tretter presented to the TOC that Dan Klawitter has met the requirements for COML

M/S/C Motion made by Gundersen to approve Dan Klawitter's COML Packet Gerber seconded. Motion carried.

COML Packet- Jacob Cree

Troy Tretter presented to the TOC that Jacob Cree has met the requirements for COML

M/S/C Motion made by Ron Jansen to approve Jacob Cree's COML Packet Scott Gerber seconded. Motion carried.

COML Packet – Robert Beem

Troy Tretter presented to the TOC that Robert Beem has met the requirements for COML

M/S/C Motion made by John Gundersen to approve Robert Beem's COML Packet Rod Olson seconded. Motion carried.

Metro Standard 3.17.5 – Incident Tactical Dispatcher

Metro Standard 3.17.6 – Radio Operator

Metro Standard 3.17.7 – Incident Communications Center Manager

Chris Kummer said these three standards were brought before the Radio TOC one year ago. It was decided they would be pushed to the state so they could reside with the COML and COMT standards. Since that was done in July 2016, nothing has been done with them at the state level. SWIK has put together a workgroup and the plan is to consolidate all the standards at the state level into one.

The intent of this request is to establish certification and re-certification in the metro region. All three standards training are offered at the OEC.

Nate Timm asked Chris how many opportunities there would be to stay certified. Chris said that the COMLs and the COMT tasks are different and they will have to make the opportunities happen to use the radios to stay certified.

M/S/C Motion made by Ron Jansen to approve all three of the standards as written to be Metro Standards and to eventually be sunset at the point when the state takes over. Timm seconded. Motion carried.

Dakota County Request for Exception of State Standard 3.19.0

Jansen said there are three SWAT team members on the Burnsville Fire Department. They are requesting the standardized zones be programmed into those radios. He is requesting waivers for those radios to be programmed as such. These radios would remain with the position on the SWAT team.

Tretter added that there had been a request to this committee about the time the LTAC Change Management request by Maple Grove Fire Department for six command fire radios to have the LTACs programmed in them. They could be transferred from fire to law enforcement and was approved by this committee. It was not approved.

Jansen is requesting this be approved by the Metro, then it will go to the OTC.

M/S/C Motion made by Gundersen to approve moving forward to request waiver from the state standard 3.19.0. Thompson seconded. Motion carried.

Move, Additions & Changes to the System

Update on Removal of Voting from Interoperability System

Jansen there were no changes. Tretter noted Kingstack and Hennepin County needed to be finished.

Gundersen said the SATCOW is fully operational and is ready for deployment.

Committee Reports

Metro Mobility System Usage Update

Dana Rude said their Participation Plan is past the OTC. Changes will take place in May. They continue the CAD discussion of license responsibility.

System Manager's Group/Metro Owner's Group Update

Jansen said there were a number of updates to the system. The current 715 upgrade is pretty much done and on target. Still looking at 717 in 2018. There was a presentation on life cycle roadmap. Some key features like an edge server that could be purchased. 718 will be the last released version to support T1 service.

Also discussed was the upcoming Interoperability Conference, the P25 encryption and the LETAC standard 3.19.0 which will be brought up at the MOG next month.

Reports from SECB Committees

Steering

Tretter said at the last meeting they continued to discuss the federal participation potential of charging federal partners to use the ARMER system and the cleaning up of the Participation Plans.

Jill Rohret said that there seemed to be some participants that came onto ARMER as Interoperability participants but looking at their usage they appear to be using the system as a full participant.

Scott Haas asked if there has been discussion about where those dollars would go if they were to be charged. Is there a possibility that some of the local entities could recoup their expenses?

Tretter said that item has not as yet been addressed.

OTC

Gundersen said there was an OTC meeting on March 15. A number of items were discussed. One was a presentation by Jim Schnoor of the Federal Reserve Bank. They asked for more IDs. That was approved. There was discussion as to whether they should continue be an interop participant because they have one talkgroup on the system. No decision was made. The metro mobility change request was approved. The St. Cloud participation plan amendment was approved. It allows then to try to use data on the ARMER system. There is a continuing project in the OTC led by Kathy Anderson that reviews standard; primarily name changes etc., not substantive changes. standards are reviewed. There was discussion on some subscriber testing results on radios that was tabled until next month after more testing. Lake of the Woods changes were approved. Allina was approved.

Gundersen reviewed the handout on the Weather Service issue and there was an objection read by the Northeast region at the last meeting of how the metro was perceived to have favoritism. Gundersen asked if there was a need for a response from the metro TOC.

Tretter added that here was a change management standard that went before the OTC that was ultimately voted down by the SECB, and it was brought up at a later meeting that it was perceived that the metro was given special privileges.

Gundersen we could respond to this to build our case or we will have to continue to work with these other regions to build comradery.

Tretter said that there was no objection from the Northeast at the February meeting to go back to a workgroup. The Central Region also had an issue with the Weather Service Standard. Tretter said that Doris Lake is going to be the 9-1-1 TOC representative to join as the second metro representative.

Gundersen said perhaps this is something that the MESB should address board to board. Rohret said she did not think it required any sort of official response because it was not directed to the SECB. We have the same number of votes as outstate and there is really no advantage in the metro. We can give talking points, but responding might look defensive.

Interoperable Data Committee

Rod Olson there was a short call in meeting on Tuesday. The only topic was the Task 10 document from Televent. The workgroup requirement summary was approved.

FirstNet was approved and AT&T is the provider.

Interoperability

Jake Thompson said that Minnesota Power is requesting use of Interop VHF channels. There was a memo from Jim Stromberg on Super Bowl planning. More information at next meeting. There was an Interoperability Committee review.

IPAWS

Scott Haas reported the meeting was held at TPT in St. Paul, Multi lingual challenges were discussed with notifications. No discussion about the IPAWS National Weather Service gateway. IPAWS and the Monticello training event was discussed. The Wireless emergency alert was approved for the MAC PSAP.

Finance/Grants Workgroup

Tretter said the amendment for the SECB was approved. There were some dollar allocations that needed to be readjusted. Cannot reapply for the grants yet. More documentation is needed from ECN.

Rohret said that there could be amendments to the contracts because there were some PSAP were omitted from the firewall plan. ECN has come out with some clarifying language regarding PSAPs that have or will be migrating to SIP by October of this year.

2017 Interoperability Conference May 1-3 (MN Public Safety Emergency Communications Conference)

Dave Pikal said the registration will be open soon. The agenda is finalized. Tretter added that the MESB can send up to twenty-five registrants.

Other Business

Regional Talkgroup Permissions Requests

Jim Schnoor of the Federal Reserve Bank requested METACs 1-10. And METCOM. Rod Olson said that would have a load bearing effect. Tretter said the standard does state they are to be used EOCs, and Incident Command Centers. Kummer asked if the use case could be explained. Schnoor said it

would be helpful if a direct connection would be similar to what other PSAPs do by calling directly to HCMC if we need EMS response.

M/S/C Motion made by Ron Jansen to approve the request for the METACs 1-10 and disapprove request for METCOM access. Chris Kummer seconded. Motion carried.

Communications Case Studies

Rick Juth said there is room at the Public Safety Communications conference to add or two case studies to the Communications Case Studies Session.

Adjourn

DRAFT

Minnesota COML Team

Metro Region Communications Unit Leader

Type III COML CERTIFICATION CHECK OFF

The following items checked are included in this packet

- ☒ All Prerequisite Training Completed
 - ☒ ICS 700 (Printout attached)
 - ☒ ICS 800 (Printout attached)
 - ☒ ICS 100 (a or b) (Printout attached)
 - ☒ ICS 200 (Printout attached)
 - ☒ ICS 300 (Printout attached)

If you are part of the Minnesota training Website, A print of the HSEM Certification Record Completed courses main page with the above courses listed will be sufficient.

- ☒ Copy of Certificate from COML training
- ☒ Agency Certification (attached)
- ☒ Completed Task Book (with evaluator reviews)
- ☒ Copy of an Incident Action Plan, Incident Communications Plan, or After Action Plan (only one needed)
- ☒ Final Evaluator Certification (attached)
- ☒ Regional Interoperability Coordinator review


(Signature)

Troy Tretter
(Printed Name)

- ☐ Regional Radio Board – Technical Operations Committee Review

(Chair of Radio-TOC Signature)

Scott Haas
(Printed Name)

- ☐ Statewide Interoperability Program Manager Review

(Statewide Interoperability Program Manager Signature)

Jim Stromberg
(Printed Name)



FEMA

Emergency Management Institute – Independent Study Program

16825 South Seton Avenue, Emmitsburg, MD 21727 (301) 447-1200

STUDENT TRANSCRIPT

Last Name	First Name	MI	Student ID
SLOAN, III	CHARLES		***-**-8932

Issued: March 06, 2017

<u>Course Code and Title</u>	<u>Completed</u>	<u>IACET CEUs*</u>
IS-00144 Telecommunicators Emergency Response Taskforce (TERT) Basic Course	10/14/2016	0.3
IS-00800.b National Response Framework, An Introduction	05/07/2016	0.3
*****End of Transcript*****		

Tony Russell
Superintendent
Emergency Management Institute

* One Continuing Education Unit (CEU) is equal to ten (10) student contact hours using the guidelines of the American National Standards Institute (ANSI) / International Association for Continuing Education and Training (IACET) I-2007 Standard.

Emergency Management Institute



FEMA

This Certificate of Achievement is to acknowledge that

CHARLES SLOAN III

has reaffirmed a dedication to serve in times of crisis through continued professional development and completion of the independent study course:

IS-00700.a

National Incident Management System (NIMS)

An Introduction

Issued this 20th Day of March, 2017



Tony Russell
Superintendent
Emergency Management Institute

Emergency Management Institute



FEMA

This Certificate of Achievement is to acknowledge that

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IS-00200.b

**ICS for Single Resources and
Initial Action Incident, ICS-200**

Issued this 20th Day of March, 2017



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Emergency Management Institute

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FEMA

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CHARLES SLOAN III

has reaffirmed a dedication to serve in times of crisis through continued professional development and completion of the independent study course:

IS-00100.b

Introduction to Incident Command System

ICS-100

Issued this 19th Day of March, 2017



Tony Russell
Superintendent
Emergency Management Institute



FEMA

National Fire Academy

Charles Sloan, III

is awarded this certificate in recognition of completion
of the NFA State/Local Partner-Sponsored Training

**ICS 300, Intermediate ICS for Expanding
Incidents for Operational First Responders
St Paul, Minnesota**

August 3 - 4, 2016

This course meets the NIMS requirements for ICS-300.

14. E. M. (Active)
Superintendent
National Fire Academy

Emergency Management Institute



FEMA

This is to certify that

Charles Sloan, III

successfully completed

**NIMS ICS All-Hazards Communications Unit Leader
Saint Paul, Minnesota**

2.80 IACET CEU

August 8 - 10, 2016



Superintendent
Emergency Management Institute

MINNESOTA DEPARTMENT OF PUBLIC SAFETY



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State Fire Marshal

Emergency Communication Networks

445 Minnesota Street • Suite 137 • Saint Paul, Minnesota 55101-5137

Phone: 651.201.7547 • Fax: 651.296.2665 • TTY: 651.282.6555

www.ecn.state.mn.us

MESB

Minnesota Communications Unit Exercise (COMMEX) Results Letter

November 7, 2016

Dear Charlie,

Congratulations! You have completed all the required tasks during the COMMEX. Enclosed is your Position Task Book (PTB), along with your exercise support documents.

You will need to have your agency complete the agency certification portion of the PTB. After that, you will need to check who needs a copy of the PTB and make enough copies to send to the following locations that may apply:

- Your personnel file
- Your agency training or credentialing committee
- Your primary Emergency Communications Board (ECB) or Emergency Services Board (ESB)
- Any other credentialing entity (e.g., operational area, Incident Management Team (IMT) etc.)

Put the original PTB in your kit and continue to document any activities during future exercises, planned events, and incidents. After each assignment, re-copy the updated PTB and follow the same process to update your current experience.

Remember to document all activities in your PTB and do not leave the incident or event without getting an evaluation. Once your PTB is full, you will need to start a new PTB. This process will document all your experience and will help with re-credentialing requirements and keeping your skills current.

If you have any questions, I can be reached at 651-201-7548. Thank you for your participation; we look forward to seeing you at future communication-focused activities!

Respectfully,

Cathy Anderson

Standards and Training Coordinator

Anderson, Cathy (DPS)

From: Jason Karlgaard <jkarlgaa@co.ottertail.mn.us>
Sent: Monday, November 07, 2016 4:39 AM
To: Anderson, Cathy (DPS)
Subject: RE: Need mailing address info

Please mail to the following address:

Otter Tail County Sheriff's Office
Attn: Jason Karlgaard
417 S Court St
Fergus Falls, MN 56537

Also, I'd just like to say thank you again for all the work you put into the COMDEX in Grand Rapids, it was an excellent experience and I thoroughly enjoyed it!

Thanks Cathy!
Jason Karlgaard

From: Anderson, Cathy (DPS) [cathy.anderson@state.mn.us]
Sent: Friday, November 04, 2016 10:50
To: rowan.watkins@co.cook.mn.us; Simota, Thomas J SFC USARMY NG MNARNG (US); jason.burke@ci.stcloud.mn.us; Brandon Larson (Brandon.Larson@ci.stcloud.mn.us); Jason Karlgaard; Matt Jensen
Subject: Need mailing address info

Hi you guys -
Can you please send me mailing address for your Task Books? Hoping to get to it all within the next couple weeks.
THANKS!
Cathy

Cathy Anderson
Standards & Training Coordinator
Minnesota Department of Public Safety
Division of Emergency Communication Networks
445 Minnesota Street, Suite 137
St Paul, Minnesota 55101-5137
Office phone - 651-201-7548
Cell phone - 612-701-5443
Fax - 651-296-2665
Email: cathy.anderson@state.mn.us<mailto:cathy.anderson@state.mn.us>
Website: www.ecn.state.mn.us<http://www.ecn.state.mn.us/>

Sign up for the Minnesota Statewide Emergency Communications Board announcements mailing list!
<https://webmail.mnet.state.mn.us/mailman/listinfo/secb>



Homeland Security

ALL-HAZARD COMMUNICATIONS UNIT LEADER (COML)

Position Task Book

Task Book Assigned To:

Trainee's Name: Charles Sloan III
Home Unit/Agency: Hennepin EMS
Home Unit Phone Number: 612-347-2141

Task Book Initiated By:

Official's Name: WENDY L LYNCH
Home Unit Title: HENNEPIN EMS CHIEF
Home Unit/Agency: HENNEPIN EMS
Home Unit Phone Number: 612-873-3839
Home Unit Address: 701 PARK AV, MPLS. MN 55415
Date Initiated: 10-01-2016

**VERIFICATION / CERTIFICATION OF COMPLETED TASK BOOK FOR THE
POSITION OF ALL- HAZARDS COMMUNICATIONS UNIT LEADER (COML)****FINAL EVALUATOR'S VERIFICATION**

I verify that all tasks have been performed and are documented with appropriate initials.
I also verify that CHARLES SLOAN
has performed as a trainee and should therefore be considered for certification in this
position.

Final Evaluators Signature Steve Olson Date 10-12-16
Printed Name STEVEN C. OLSON Agency LAKE CO SO
Phone Number 214 934-9355 Email STEVE.OLSON@CO.LAKE.MN.US

AGENCY CERTIFICATION

I certify that CHARLES SLOAN III
has met all requirements for qualification in this position and that such qualification has
been issued.

Certifying Official's Signature Wendy Lynch Date 11-10-2016
Printed Name Wendy Lynch Agency HENNEPIN EMS
Title EMS CHIEF Phone Number 612-873-3839

HISTORICAL RECOGNITION

Historical recognition is a process that provides a means by which incident management personnel who have either:

- Documentation of previous ICS training, education, and experience in an ICS position(s); or
- Documentation of previous extensive on-the-job incident response experience, may receive credit for that previous experience, training, or qualification(s) and be considered as meeting the minimum requirements of this guide in the categories of:
 - Education;
 - Training; and
 - Experience,

for an ICS position(s) until they have successfully completed the actual minimum requirements for that position. Historical Recognition does not apply to the categories of Physical/Medical Fitness, Currency, or certification. The minimum requirements within those categories must be met regardless of any historical recognition process.

HISTORICAL RECOGNITION PROCESS

If an Authority Having Jurisdiction (AHJ) does not form a Qualifications Committee to assist with the management of the overall qualifications process, AHJ's should give strong consideration to at least forming a committee for the purposes of reviewing and processing applications for Historical Recognition. Because of the time commitment involved and the potential for perceptions of favoritism and unequal treatment during the process, other ICS qualifications processes currently used by Federal and State agencies that included a historical recognition provision used review committees to accomplish that process.

The AHJ should develop a process to provide for the following:

- Developing a method to provide for historical recognition when there is sufficient documentation available to substantiate the experience;
- Developing a standardized method for any individual to submit documentation of the experience and training for review by the AHJ or the appropriate review committee established by the AHJ;
- Developing a method to determine if the previous experience or training is appropriate for the position, keeping in mind the required criteria for the position and the competencies necessary for safe and successful performance;
- Providing for Historical Recognition only when the individual has most recently performed the position within the last five years;
- Requiring the individual meet all minimum requirements in this guide for a position if the individual seeks an ICS position other than the position they were historically recognized for;
- Encouraging all individuals who are historically recognized into a position to complete the minimum requirements for the positions within five years of being historically recognized.

INCIDENT MANAGEMENT SYSTEM POSITION TASK BOOK

Position Task Books (PTB) were developed for designated positions as described under the National Interagency Incident Management System (NIIMS) and have been incorporated into the National Incident Management System (NIMS). The position task book is used by the authority having jurisdiction to certify that the person to whom the task book belongs meets the standards recommended by the National (NIMS) Integration Center (NIC).

Each PTB lists the performance requirements (tasks) for the specific position in a format that allows a trainee to be evaluated against written guidelines. Successful performance of all tasks, as observed and recorded by an evaluator, will result in a recommendation that the trainee be certified in that position.

Evaluation and confirmation of the individual's performance of all the tasks may involve more than one evaluator and can occur on incidents, in classroom simulation, and in other work situations. Designated PTBs require position performance during which the majority of required tasks are demonstrated on a single incident. It is important that performance be critically evaluated and accurately recorded by each evaluator. All tasks must be evaluated. All bullet statements within a task that require an action (contain an action verb) must be demonstrated before that task can be signed off.

A brief list of responsibilities also appears below.

RESPONSIBILITIES:**1. The Agency Management** is responsible for:

- Selecting trainees based on the needs of their organization or area Incident Management Teams.
- Providing opportunities for evaluation and/or making the trainee available for evaluation.

2. The Individual is responsible for:

- Reviewing and understanding instructions in the PTB.
- Identifying desired objectives/goals.
- Providing background information to an evaluator.
- Satisfactorily demonstrating completion of all tasks for an assigned position within three years.
- Assuring the evaluation record is complete.
- Notifying the local agency head when the PTB is completed, and obtaining their signature recommending certification.
- Keeping the original PTB in personal records.

3. The Evaluator is responsible for:

- Being qualified and proficient in the position being evaluated.
- Meeting with the trainee and determining past experience, current qualifications, and desired objectives/goals.
- Reviewing tasks with the trainee.
- Explaining to the trainee the evaluation procedures that will be utilized and which

objectives may be attained.

- Identifying tasks to be performed during the evaluation period.
 - Accurately evaluating and recording demonstrated performance of tasks. Dating and initialing completion of the task shall document satisfactory performance. Unsatisfactory performance shall be documented in the Record of Evaluation.
 - Completing the Record of Evaluation found at the end of each PTB.
4. The **Final Evaluator** is responsible for signing the verification statement inside the front cover of the PTB when all tasks have been initialed.
5. The **Agency Head** or designee is responsible for:
- Issuing the PTB to document task performance.
 - Explaining to the trainee the purpose and processes of the PTB, as well as the trainee's responsibilities.
 - Tracking progress of the trainee.
 - Identifying incident evaluation opportunities.
 - Identifying and assigning an evaluator that can provide a positive experience for the trainee, and make an accurate and honest appraisal of the trainee's performance.
 - Documenting the assignment.
 - Conducting progress reviews.
 - Conducting a closeout interview with the trainee and evaluator and assuring that documentation is proper and complete.

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Competency 1: General

Task	Code	Evaluator # and Initials	Date
<p>1. Obtain and assemble information and materials needed for a response kit prior to receiving an assignment, including critical items needed for the assignment and items needed for functioning during the first 48 hours. The following items are suggested as basic information and materials kept in a go bag:</p> <p>Reference Materials</p> <ul style="list-style-type: none"> • Appropriate ICS forms and logs. ✓ • Current Tactical Interoperable Communications Plan (TICP) and Statewide Communications Interoperability Plan (SCIP), if available. ✓ • Inventories or other lists of local and regional communications response equipment. • Preplanned local system coverage maps. • Contact, capability, and availability — information for local and regional Communications Technicians and Specialists. • Field Operation Guide (NIFOG). ✓ • COML Mobilization Guide (specific to ✓ locality). <p>Supplies</p> <ul style="list-style-type: none"> • Pads of paper, pencils, pens, and tape. ✓ • Portable radio(s) as appropriate for the region. • Personal items (including medicine and ✓ cash), food and beverage to be self-sustained for 48 hours or more. • Radio programming equipment (cloning ✓ cable or computer), adapters, and suitable tools. • GPS. ✓ • First-aid kit. ✓ • 24-hour clock. • Multi-purpose knife. ✓ 	O	I SLO	10-12-14

Code: O = Can be completed in any situation (Simulation, Classroom, Daily Job)

Code: I = Must be performed on an Incident, Planned Event*, or an FE/FSE* (*Must be pre-approved by the Statewide Interoperability Coordinator (SWIC))

Task	Code	Evaluator # and Initials	Date
2. Establish and maintain positive interpersonal and interagency working relationships. <ul style="list-style-type: none"> • Through briefings, discuss EEO, civil rights, sexual discrimination, and other sensitive issues, with assigned personnel. • Create a work environment that provides diversity and equal opportunity for all personnel assigned to the incident. • Provide equal assignment opportunities based on individual skill level. • Monitor and evaluate progress based on expected work standards. 	O	I SCO	10-12-16
3. Provide for the safety and welfare of assigned personnel during the entire period of supervision. <ul style="list-style-type: none"> • Recognize potentially hazardous situations. • Inform subordinates of hazards. • Provide safety and identifying equipment, such as vests identifying the communication's function, flashlights, and glow sticks. • Ensure that special precautions are taken when extraordinary hazards exist. • Ensure adequate rest, hydration, and nutrition is provided to all unit personnel. • Recognize any special medical needs of all unit personnel. 	I	I SCO	10-12-16

Competency 2: Mobilization

Task	Code	Evaluator # and Initials	Date
4. Obtain complete information from the public safety communications center(s) serving the area and incident upon initial activation, including: <ul style="list-style-type: none"> • Incident name and, as appropriate, an order, request, or other unique number identifying the incident for tracking purposes. • Reporting location. • Reporting time. • Transportation arrangements/travel routes. • Contact procedures during travel (telephone/radio). 	I	I SCO	10-12-16

Code: O = Can be completed in any situation (Simulation, Classroom, Daily Job)

Code: I = Must be performed on an Incident, Planned Event*, or an FE/FSE* (*Must be pre-approved by the Statewide Interoperability Coordinator (SWIC))

Task	Code	Evaluator # and Initials	Date
5. Gather information to assess the incident assignment. This is an ongoing task throughout all phases of the incident. Include assigned resources in a draft Incident Radio Communications Plan (ICS Form 205). Examples of important information include: <ul style="list-style-type: none"> • Frequencies and/or talkgroups already assigned. • Other mutual aid channels or equipment already in use. • Gateway or other interoperability devices already in use. • Other current incidents or events that may create conflicts communications plans or tax resources. 	I	I Sloan	10-12-16
6. Contact Local Communications Coordinator or Communications Duty Officer (CDO) at NIFC or any local or state resources as necessary to determine frequencies and equipment assigned to the incident. If appropriate for this incident.	I	I Sloan	10-12-16
7. Arrive at incident and check in. Arrive properly equipped at the assigned incident location within acceptable time limits.	I	I Sloan	10-12-16
8. Obtain briefing from supervisor. Examples of briefing items are: <ul style="list-style-type: none"> • Work space. • Work schedule. • Policies and operating procedures. • Current resource commitments and expectations. • Current situation. • Expected duration of assignment. • Special needs. This list is not all inclusive; COML is responsible for asking adequate questions.	I	I Sloan	10-12-16
9. Receive Incident Action Plan (IAP) or Incident Briefing Form (ICS Form 201), if developed. Determine support needs to meet the IAP.	I	I Sloan	10-12-16

Code: O = Can be completed in any situation (Simulation, Classroom, Daily Job)

Code: I = Must be performed on an Incident, Planned Event*, or an FE/FSE* (*Must be pre-approved by the Statewide Interoperability Coordinator (SWIC))

Task	Code	Evaluator # and Initials	Date
10. Determine requirements for communications to be established and place the initial order. Using information obtained from IAP, section briefings, and agency briefings; immediately order (using proper procedures) supplies, materials, and equipment necessary to support projected incident size.	I	Z SCO	10-12-16
11. Evaluate needs and order supplies, materials, and personnel to keep unit operating. <ul style="list-style-type: none"> Order materials and supplies using procedures established by the section chief. Maintain quantities of supplies and materials at a level to prevent shortage of any basic needed items. Ensure adequate personnel to support the communications unit, technicians, radio operators, etc. Coordinate with the participating agencies for any or additional interoperability resources that may be needed. Assess current tactical communications equipment needs such as power sources for extended operations. 	I	Z SCO	10-12-16
12. Organize and supervise unit. <ul style="list-style-type: none"> Brief and keep subordinates informed and updated. Establish unit time frames and schedules. Assign and monitor work assignments. Review and approve time. Develop team work. Provide counseling and discipline as needed. Follow established procedures for reporting inappropriate actions involving contractors, military, or other personnel. Brief relief personnel. 	I	Z SCO	10-12-16

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Task	Code	Evaluator # and Initials	Date
13. Participate in incident planning meetings as the technical expert for communications needs. <ul style="list-style-type: none"> • Determine the feasibility of providing the required communications support. • Provide operational and technical information on communications equipment available for the incident. • Provide operational and technical information on communications equipment and systems capabilities and restrictions. Coordinate with other Communications Unit Leaders under any Area Command established to share information and assure communications interoperability. 	I	7 JCO	10-12-16
14. Design communications systems to meet incident operational needs. <ul style="list-style-type: none"> • Determine additional resource needs and order necessary equipment and personnel. • Prepare Incident Radio Communications Plan, ICS Form 205. • Request any additional communications vendor services (e.g., telephone, SATCOM, microwave) and identify costs associated with equipment. • Coordinate, through the chain of command, the locations for equipment to be installed (e.g., repeaters, satellite telephones, telephone lines, etc.). • Provide communications support for external and internal data operations. • Order frequencies following the proper procedures. • Create diagrams of current communication system(s). • Determine optimal locations for any future expansion of communications equipment using topographical maps to evaluate elevation and separation needs. 	I	7 JCO	10-12-16

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Task	Code	Evaluator # and Initials	Date
15. Install communications equipment. <ul style="list-style-type: none"> Obtain equipment from supply unit, if one exists and/or from authorized sources. Provide for the installation of and test all components of the communications equipment to ensure the incident's systems are operational, for example: <ul style="list-style-type: none"> Command repeater. Logistics repeater. Links (radio and wire-based). Remotes. Gateways. Aircraft and other special needs. Develop installation priorities, while adhering to safety standards regarding communications needs of tactical personnel (i.e., operations before logistics.). Clone or program radios as necessary and authorized. 	I	2 SCO	10-12-16
16. Assign communications equipment. <ul style="list-style-type: none"> Identify kinds and numbers of communications equipment to be distributed to specific units according to the communications plan. Provide resources and unit leaders with appropriate equipment based on the communications plan. Provide basic training as needed on equipment being fielded. Maintain equipment inventory to provide accountability 	I	7 SCO	10-12-16
17. Establish Incident Communications Center (ICC). <ul style="list-style-type: none"> Coordinate location of ICC with Facilities Unit Leader. Locate ICC close to the incident command post and away from high traffic areas and noise. Locate ICC away from radio frequency and electronic noise. Verify Estimated Time of Arrival (ETA) of communications personnel and establish assignments based on incident requirements. Set schedules around operations requirements. Obtain necessary supplies for ICC to function properly. 	I	2 SCO	10-12-16

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Task	Code	Evaluator # and Initials	Date
18. Manage operations of the ICC. <ul style="list-style-type: none"> Document radio/telephone activities on appropriate forms. Set up filing system for ICC documentation. Direct radio/telephone traffic to proper destinations. Establish notification procedures for emergency messages. Identify system problems, both technical and operational, and determine appropriate solutions. Follow established routing procedures for messages. 	I	I SCO	10-12-16
19. Coordinate frequencies, activities, and resources with communications resource coordinators outside of the incident. <ul style="list-style-type: none"> Contact communications coordinators and notify them of incident frequency, talkgroup, mutual aid channel, dispatch center, or other shared resource assignments, as appropriate. Identify communications equipment and personnel that are excess to incident needs and demobilize if appropriate. Identify resources as to type/qualifications, quantity, and location. Provide a copy of the ICS Form 205 to other agencies or to the COML at any nearby incidents as necessary to avoid interference or other conflicts. 	I	I SCO	10-12-16
20. Notify appropriate local, county, regional, State and/or Federal agencies on adjacent incident(s) of system design and frequency allocations.	I	I SCO	10-12-16
21. Initiate and maintain accurate records of all communications equipment <ul style="list-style-type: none"> Initiate and maintain accountability system for issuing hand-held radio resources Document geographic locations of equipment and transfer this information to local maps (latitude/longitude, legal). Keep records for local and national resources to ensure return to proper locations. 	I	I SCO	10-12-16

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Code: I = Must be performed on an Incident, Planned Event*, or an FE/FSE* (*Must be pre-approved by the Statewide Interoperability Coordinator (SWIC))

Task	Code	Evaluator # and Initials	Date
22. Perform operational tests of communications systems throughout the duration of the incident. <ul style="list-style-type: none"> Identify and take necessary action to accomplish minor field repair or place orders for replacement of equipment. Monitor all gateways in use. Plan for battery replacement. Act decisively to minimize interruptions in system operation. 	I	I Sco	10-12-16
23. Interact and coordinate with appropriate unit leaders and operations personnel. <ul style="list-style-type: none"> Coordinate with operations regarding system coverage and needs. Coordinate with first responders and public safety support organizations regarding needed support (e.g., medical unit for medical evacuation plan). Coordinate with special units (air operations, EOD, SWAT, etc.) for special frequency needs. Participate in planning meetings and briefings. Know what other resources may be coming to the incident, such as those from Urban Search and Rescue (USAR), National Interagency Fire Center (NIFC), FEMA, Coast Guard, etc.	I	I Sco	10-12-16
24. Identify for release any excess unit resources. Coordinate with unit managers and provide a list of excess personnel and facilities. List will include: <ul style="list-style-type: none"> Who or what is excess. Time and date of excess. The list will be reviewed daily for accuracy. Follow the established demobilization process, including notification to communications resource coordinators. 	I	I Sco	10-12-16
25. Maintain ICS Unit Log. Unit Log will be kept current, legible, and will document all major activities, which may include: <ul style="list-style-type: none"> Equipment locations. Medical evacuations. Personnel changes. 	I	I Sco	10-12-16

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Task	Code	Evaluator # and Initials	Date
26. Evaluate performance of subordinates as required by agency policy and/or permitted by agreement. <ul style="list-style-type: none">• Discuss performance evaluations with individual(s).• Maintain accuracy and fairness.• List training if needed or desired.	I	Z LIO	10-12-16

Competency 3: Demobilization

Task	Code	Evaluator# Initials	Date
27. Demobilization and check out. <ul style="list-style-type: none">• Submit all required information to the Documentation Unit Leader.• Receive demobilization instructions from work supervisor.• Brief subordinate staff on demobilization procedures and responsibilities.• Ensure that incident and agency demobilization procedures are followed.• Complete required ICS form(s) and turn in to the appropriate person.• Ensure that personnel in the unit are demobilized correctly.• Document lost equipment on agency specific forms.	I	Z LIO	10-12-16

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All-Hazard Communication Unit Leader**INSTRUCTIONS FOR COMPLETING THE RECORD OF EVALUATION**

There are four separate pages allowing evaluations to be made. These evaluations may be made on incidents (may include planned events and full scale exercises), simulation in classroom, or in daily duties, depending on what the position task book indicates. This should be sufficient for qualification in the position if the individual is adequately prepared. If additional blocks are needed, a page can be copied from a blank task book and attached. (Remember to change the Evaluation Record # to the next sequential number.)

COMPLETE THESE ITEMS AT THE END OF THE EVALUATION PERIOD:

Trainee's name and Trainee's position: Self Explanatory

Evaluator's name, title and agency: List the name of the evaluator, and his/her incident position (on incidents) or office title, and agency.

Evaluator's agency address, e-mail address and phone: Self explanatory

Evaluation Record #: The number prepopulated in the upper left corner of the evaluation page identifies a particular experience or group of experiences. This number should be placed in the column labeled "Evaluation Record #" on the Qualification Record for each task performed satisfactorily during the evaluation opportunity.

Name and Location of Incident or Situation: Identify the name of the incident (if there is one) and the location where the tasks were performed. If evaluation occurs during a short term situation rather than a named incident, list the responding agency and area.

Incident Kind: Enter kind of incident, e.g., hurricane, wild land fire, search and rescue, flood, preplanned event, full scale exercise, etc.

COMPLETE THESE ITEMS AT THE END OF THE EVALUATION PERIOD:

Number and Kind of Resources: Enter how many resources of each kind assigned to the incident pertinent to the trainee's task book position. (e.g. 2 mobile communications vehicles)

Duration: Enter inclusive dates during which the trainee was evaluated. If evaluation occurs during a short term situation, enter date and start and end time of evaluation. (e.g. 11/1/14 to 11/4/14)

Management Level or Complexity Level: Indicates ICS organization level, i.e., Type 5, Type 4, Type 3, Type 2, Type 1, Area Command.

Recommendation: Check as appropriate and/or make comments regarding the future needs for development of this trainee.

Date: List the date the record is being completed.

Evaluator's initials: Evaluator initials here to authenticate their recommendations and to allow for comparison with initials in the Qualifications Record.

Evaluator's relevant rating: Evaluator lists their certification relevant to the trainee position they supervised.

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RECORD OF EVALUATION

TRAINEE NAME		TRAINEE POSITION		
Evaluation Record #1	Evaluator's name: SEVEN C. OLSON	Evaluator's Title: COMM INSTRUCTOR	Evaluator's Agency: LAKE CO SHERIFF'S OFFICE	
Evaluator's agency address: 6013 3 RD AVE. TWO HARBORS, MN 55616				
Evaluator's e-mail: STEVE.OLSON@CO.LAKE.MN.US			Phone: 218 831 8355	
Name and Location of Incident or Situation (agency & area)	Incident Kind (hazmat, tornado, flood, structural fire, wildfire, search & rescue, etc.)	Number & Kind of Resources Pertinent to Trainee's Position	Duration (inclusive dates in trainee status)	Management Level or Complexity Level
GRAND RAPIDS MN - CONNEX	TRAIN DERAILMENT	MCU, APR, XTS LAPTOP FOR LOGS	10-12-16 0700-1900	3
<p>The tasks initialed & dated by me have been performed under my supervision in a satisfactory manner by the above named Trainee. I recommend the following for further development of this Trainee:</p> <p><input checked="" type="checkbox"/> The individual has successfully performed all tasks for the position and should be considered for certification.</p> <p><input type="checkbox"/> The individual was not able to complete certain tasks (comments below) or additional guidance is required.</p> <p><input type="checkbox"/> Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.</p> <p><input type="checkbox"/> The individual is severely deficient in the performance of tasks for the position and needs further training (both required & knowledge and skills needed) prior to additional assignment(s) as a Trainee.</p> <p>Comments: <u>ALTHOUGH UNIT LOG AND RADIO LOGS WERE DOCUMENTED, THEY SHOULD BE KEPT SEPARATE IN THE FUTURE.</u></p>				
<p>Date: 10-12-16 Evaluator's initials: SCO</p> <p>Evaluator's relevant agency certification or rating: COMM - INSTRUCTOR</p>				

ICS Form 205 Incident Radio Communications Plan

1. Incident Name Train Derailment		2. Date/Time Prepared: Date: 10-12-16 Time: 0916		3. Operational Period: Date From: 10-12-16 Time From: 0916		Date to: 10-13-16 Time To: 0700	
---	--	--	--	--	--	--	--

Zone Gp.	Ch #	Channel Name/ Trunked Radio System Talk group	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode (A, D, or M)	Remarks
		COMMAND COMMAND	IT EVT 1 IT EVT 2					D	Unified Area Cmd
		COMMAND COMMAND	IT EVT 2 IT EVT 3					D	Unified Area Cmd
		Fire TAC Fire TAC	ITSC Fire 1 ALB TAC					D	Unified Area Cmd
		Fire TAC Fire TAC	IT Fire 1 DN A					D	214 Tactical Net
		Fire TAC Fire TAC	IT Fire 2 DN B						Tactical Net
		Fire TAC Fire TAC	IT Fire 3 DN Z						Tactical Net
		Fire TAC Fire TAC	IT Fire 4 DN Y						Tactical Net
		LE TAC LE TAC	IT Ps Comm LE Net						LE Net
		LE TAC LE TAC	IT Law 3 LE Net						LE Net
		LE TAC LE TAC	IT Law 2 LE Net						LE Net
		LE TAC LE TAC	IT Law 1 LE Net						LE Net
		PD PD	ITSC Comm TAC Net						Tactical Net / on
		CST 55th STAC - 1	STAC - 1 Staging						Staging
		A 2 G STAG 58D	LL 111 7149.13125			7149.13125		D	Air to ground
		A 2 G 7AG 58D	7AG 58D Trooper 7			7149.13125		D	Air to ground

5. Special Instructions:
60D

5. Special Instructions: LOD	
6. Prepared by (Communications Unit Leader): Name: Charles Sloan III	Signature: [Signature]
ICS 205	Date/Time: 10-12-16 0916

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (Project 25)

Approved **SM** **ICF1** **10/14** **0916**

GENERAL MESSAGE (ICS 213)

1. Incident Name (Optional): Train Derailment

2. To (Name and Position):

3. From (Name and Position): Charles Sloan III COML

4. Subject: COML Needs / Requests

5. Date:

10-12-16

6. Time

10:15 AM

7. Message:

I am requesting a relief COML for the
Next operational Period. Next operational
Period is 0600 - 1900, 10-13-16.

Please have the Relief COML Report +
I.C. Coms Van.

8. Approved by:

Name:

Charles Sloan III

Signature:



Position/Title:

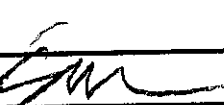
COML

9. Reply:

Approved

10. Replied by:

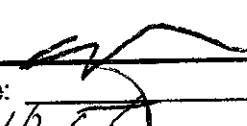
Name:



Position/Title:

ICF

Signature:



ICS 213

Date/Time: Date

10/12

10:50

ICS Form 201 Incident Briefing

INCIDENT BRIEFING	1. INCIDENT NAME	2. DATE	3. TIME PREPARED
-------------------	------------------	---------	------------------

4. MAP SKETCH (NTS)

Function	Frequency or Talkgroup Name	Assignment	Function	Frequency or Talkgroup Name	Assignment
Command			Tactical		
MACS			Tactical		
Tactical			Tactical		
Tactical			Tactical		
Tactical			Air		
Tactical			Air		
Tactical			Staging		

Division A - Brady 304
 FD Chief 3 116
 Div B - Chief Z 114
 LE - Carlson 305
 Div Z - Gorgen 306
 Sup Chief 6 115
 Div Y - Spitt 306
 FD Sup CY 111



Staging Area
Name



Number (H-1, etc.)
and Name



Camp Name



Hazard (Identify type, e.g.
power lines)

5. PREPARED BY (NAME AND POSITION)

charlie sloan COML.txt
train comm f scene 3 on scene - assuming 1322 - looking for assignments
fsgt bradley - on cscene div e evac - channel assignment and resources 1323
was assigned to IT Fire 1, but he said he was LE

fire scene 3 still standing by 1325 , 1329 - will be on IT 3 - resources assuming
div a - need assigned channel and list of all current resources avail - 1330
gave cell phone to fire scene 3 at 1332 612-499-5550.

Div a - bradley unit 304
FD chief 3 - 116
Div B - Chief 2 - 114
LE - Carlson 305
Div 2 Gorgen - 308
Sup Chief 6 - 115
Div 4 - Spitt - 306
FD Sup c4 111

IT Event 1 - Command net (unified command)
Div A on IT fire 1
Div B on IT fire

train comm sgt bradley - have we changed channel assignment yet? 1336 IT law 3 -
1337

gr pd 301 - uc with gr fd chief 1 - what is location of ICP 1337
southern staging area at airport 1338
gr pd 301 heading towd exercise

est le and div b supervisor - le div pd sup - IT law 1 1341
fire C2 estab fd div b - channel assignments and list of resources 1342

IT fire 2 - will send copy of com plan 1343
fire c2 stay on f2 - common used for PW
has gloves on - not providing cell phone info right now, staying on IT fire 2

imt log section 1351
on scene - looking for location - need to get in touch with imt - need cache 8-9
radios
nw side of scene - murhunt staging area. 1353

nw 11th st and nw 4th ave 1353
8-9 radios to get to the IMT network - 1354

train op section chief on - need channel for staging asap 1356
itsc fire disp channel 1356

c4 on scene assuming div y - what's assigned channel list of resources 1357
IT fire 2 1358

sgt smith gr pd on scene est div y le - channel assignment and list of resources?
1401
spitt and sup c4 111

Sgt smith - move to common - IT fire common 1 1404
HM1 = looking for assignment and tactical channel -
NE 5 - 1405

charlie sloan COML.txt

sgt morgan gr pd - estb le z, list of resources and channel assignments -
IT law z, resources gogen, chief 6 - 1408

llIII - air to ground channel - 7AG58D 1415
stac 12 - 1416

msp 3101 os 1418
icp - south side of incident at airport 1418

55th cst - 1420
report to staging, stac 1

docl - identify comm asset channel assignment locations - map sketch for archives .
send to local psap - close to airport can run by and pick it up. 1428

imt log section chief - wants cache of radios - needs 35. coml-t said we have 50.
need request form.
also needs someone to train him on radios - 1429. need comm plan as well. stopped
in ICC 1430

demob - start demobing incident personnel - send 213 of excess personnel asap .
per coml-t wrong form. demob form - 1443

unit 116 slid off road need medical assistance, ne of rescue area, ne 11th ave and
4th, poss laceration to forehead/need stitches, all out of veh. 1448

GENERAL MESSAGE (ICS 213)

1. Incident Name (Optional): RAIN

2. To (Name and Position): Charles Corlett

3. From (Name and Position):

4. Subject:

5. Date:

Date 12/12/2014

6. Time

HHMM 1436

7. Message:

(35) Radio to Battery
Kind & Type
Trainer
Comm Plan
Extra mics - belt clips

ASAP - Time

8. Approved by: Name: _____ Signature: _____ Position/Title: _____

9. Reply:

MARK LALLAGE
Mark Lallage
218-398-7555

10. Replied by: Name: _____ Position/Title: _____ Signature: _____

ICS 213

Date/Time: Date

ICS Form 205 Incident Radio Communications Plan

1. Incident Name		2. Date/Time Prepared:		3. Operational Period:						
Train Decal/maff		Date: 10-12-16 Time: 0916		Date to: 10-13-16 Time To: 0700						
4. Basic Radio Channel Use:										
Zone Grp.	Ch #	Function	Channel Name/ Trunked Radio System Talk group	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode (A, D, or M)	Remarks
1		CMD	IT Evt 1	CMD						
2		FD TR	IT Fire 2	ATB						
3		FD TR	IT Fire 2	Y+Z						
4		FD TR	IT Fire 3	Y+Z						
5		FD TR	IT Fire 4	Y+Z						
6		LE TAC	IT Law 1	A+B						
7		LE TAC	IT Law 2	Y+Z						
8		AW TAC	ITSC Com 1	Salvage						
9		FD TAC	ITSC Fire Dep	Staging						
10										
11										
12										
13										
14										
15										
16										
5. Special Instructions:										
6. Prepared by (Communications Unit Leader): Name:										
Signature:										
Date/Time:										
ICS 205										
JAP Page										

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (Project 25)

Ops Briefing A

Charles Sloan III

Charles
Sloan III

Introductions - 810

Exercise Goal - 817

Exercise OBJ - 818

S-phases - 0820

214, 201, 213 - 827

42° - Degrees


Cloudy Overcast Skies

9-16 MPH - SW

Train - 20161699

NW 4th St @ NW 2nd Ave

Train Derailment & Reported Fire & Casualties

LE + FD  - ICP

Unified Area Command @ EOB

Local LE & Fire & EMS

Response

Command Net

Dispatch EOL

Fire / EMS

TIT

Resq

Zool

Charles Sloan III

Charles
Sloan III

IE - Evac

Security

Perimeter/Traffic

Public Wrx

Equip Supplies

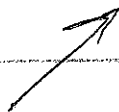
DIV B

Civic Center
Stagnus

Derail

DIV Y

DIV Z.



9-16
mph

Declin - 08:25

211

Incident Briefing

201

Assignment Directives

Order Personnel/Equipment

213

Draft 205

Review 205

200L

Charles
Shoem III

I/C
619-379-3995

~~Radio~~ Train I/C

Intrap Channels -

Comm Coord.
218-398-5995

Command IT-EVT 1
IT-EVT 2
IT-EVT 3

0700 OP Period

5 Tac's Net / Fire

#1 A/B Tac Net -
PS-Comm 1

#2 2/4 1 - Net
Tac Assign
Tac Available

2 AZG Nets
Medical

Trooper 7

FD Tac - Haz Mat #3

Le Tac Nets - 4 IT PS Comm
IT Law 3

PW's Tac Net

CST Respond I Tac Net
1 Staging

200L

Charles Sloan III

Cable Rantios -

Relief ICS 213

Personnel

RADO - Family Emergency

- #1 Goal + Expectation - Prof Standards!!
- #2 Personnel Welfare
- #3 Safety Message - FA Kit Meds
Reported Treated Documented

Tactics Meeting!!

Created RJ45 - OK

Created Ringdown Circuit - OK

Punchdowns

Created Wireless Router Connectivity

Power Router up

Connect RJ45 Ethernet Cable to

Computer + Router.

Network Name CS3 / Pin: EC8R-20NZ-KK98

192.168.1.101

Murkwat Staging Area -
Comm C

200L



612 Industrial DR SW, Willmar, MN 56201
320-235-0811 DaveS@WCCwireless.com



April 13, 2017

City of Princeton
705 2nd St N
Princeton, MN 55371

Re: Application for CRAE using 8Tac 91 at Princeton High School, per Standard 3.47.0

The City of Princeton is requesting to install a CRAE (Conventional Resource ARMER Enhancement) repeater system, using 8Tac91 channel to be used for Emergency Interoperability purposes for in-building coverage at Princeton High School.

Currently there is no ARMER portable coverage within the Princeton High School. Emergency Responders entering the High School are forced to use a SOA channel, which does not give portable to portable coverage throughout the building. The SOA also limits the Emergency Responders to no access to Mille Lacs County Dispatch, and other ARMER Talk Group resources. Implementation of the CRAE system will allow communications to all on site users, and to Mille Lacs dispatch and ARMER talk group resources, which will be controlled by Mille Lacs County Dispatch.

The intended coverage footprint is designed for in-building penetration using only enough transmit power from the repeater to penetrate the building. The antenna system will consist of a 0db gain antenna to help force down the signal into the building. The Federal frequencies and tones will be used in an analog mode, which are already programmed into existing subscribers.

Mille Lacs County will be the responsible agency.
Mille Lacs County Sheriff
Sheriff Brent Lindgren
640 3rd St SE
Milaca, MN 56353
320-983-8250

Since this CRAE location is within the Central Minnesota Emergency Service Board area, this request will be forward to them. There are two other regions (Northeast and Metro) that are within the 30-air mile radius. Once the request is approved by the Central region, it will be forwarded to the other regions for their approval. Final approval to implement the CRAE will be presented to the Operations and Technical Committee.

There is no usage of 8Tac 91 within the immediate area (see attachments for state wide use of 8Tac91. Attached are copies for FCC license schedule D & H.

Mille Lacs Local System Administrator will be responsible for training on this system. In Addition, the Regional CASM (Communication Asset Survey Mapping) plan will be updated. The local Administrator will also coordinate with SWIC (statewide Interoperability Coordinator) to add this resource to the MNFOG (Minnesota Field Operations Guide).

Submitted by
West Central Communications Inc
David Sisser

1) Action Requested: (<u>A</u>) <u>Add</u> <u>Mod</u> <u>Del</u>		2) Location Number: <u>1</u>	
3) Location Description: <u>M</u>		4) Area of Operation Code: <u>A</u>	
5) Location Name: <u>MOBILES</u>			
6) FCC Antenna Structure Registration # or N/A (FAA Notification not Required):			
7) Latitude (DD-MM-SS.S): <u>NAD83</u> () <u>N</u> or <u>S</u>		8) Longitude (DDD-MM-SS.S): <u>NAD83</u> () <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Other Location Description:			
10) City:		11) State:	
12) County/Borough/Parish:			
13) Elevation of Site AMSL (meters) ('a' in antenna structure example):		14) Overall Ht AGL Without Appurtenances (meters) ('b' in antenna structure example):	
15) Overall Ht AGL With Appurtenances (meters) ('c' in antenna structure example):			
16) Support Structure Type:			
17) Location Number: (only for Area of Operation Code 'A')		18) Radius (km): <u>0.8</u>	
19) Airport Identifier:		20) Site Status:	
21) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)		22) Maximum Longitude (DDD-MM-SS.S): Use for rectangle only (Northwest corner)	
<u>NAD83</u> () <u>N</u> or <u>S</u>		<u>NAD83</u> () <u>E</u> or <u>W</u>	
23) Do you propose to operate in an area that requires frequency coordination with Canada? () <u>Yes</u> <u>No</u>			
24) Description: (only for Area of Operation Code 'O')			
25) Number of Units: <u> </u> Hand Held <u> </u> Mobile <u> </u> Temporary Fixed <u> </u> Aircraft <u> </u> Itinerant			
26) Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? See Section 1.1307 of 47 CFR. If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311. () <u>N</u> <u>Yes</u> <u>No</u>			
27a) If the site is located in one of the Quiet Zones listed in Item 27b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified:			
27b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application? () <u>N</u> <u>Yes</u> <u>No</u>			
28) Do you propose to operate in an area that requires frequency coordination with Mexico? () <u>N</u> <u>Yes</u> <u>No</u>			

1) Action Requested: (<u>A</u>) <u>Add</u> <u>Mod</u> <u>Del</u>		2) Location Number: <u>2</u>	
3) Location Description: <u>F</u>		4) Area of Operation Code:	
		5) Location Name: <u>HIGH SCHOOL</u>	
6) FCC Antenna Structure Registration # or N/A (FAA Notification not Required):			
7) Latitude (DD-MM-SS.S): <u>45</u> <u>33</u> <u>35.5</u>		8) Longitude (DDD-MM-SS.S): <u>93</u> <u>35</u> <u>6.9</u>	
NAD83 (<u>N</u>) <u>N</u> or <u>S</u>		NAD83 (<u>W</u>) <u>E</u> or <u>W</u>	
9) Street Address, Name of Landing Area, or Other Location Description: <u>807 8TH AVE S</u>			
10) City: <u>PRINCETON</u>		11) State: <u>MN</u>	
		12) County/Borough/Parish: <u>MILLE LACS</u>	
13) Elevation of Site AMSL (meters) ('a' in antenna structure example): <u>297.2</u>		14) Overall Ht AGL Without Appurtenances (meters) ('b' in antenna structure example): <u>38</u>	
		15) Overall Ht AGL With Appurtenances (meters) ('c' in antenna structure example): <u>39</u>	
16) Support Structure Type: <u>BANT</u>			
17) Location Number: (only for Area of Operation Code 'A')		18) Radius (km):	
		19) Airport Identifier:	
		20) Site Status:	
21) Maximum Latitude (DD-MM-SS.S): Use for rectangle only (Northwest corner)		22) Maximum Longitude (DDD-MM-SS.S): Use for rectangle only (Northwest corner)	
NAD83 () <u>N</u> or <u>S</u>		NAD83 () <u>E</u> or <u>W</u>	
23) Do you propose to operate in an area that requires frequency coordination with Canada? () <u>Yes</u> <u>No</u>			
24) Description: (only for Area of Operation Code 'O')			
25) Number of Units: <u> </u> Hand Held <u> </u> Mobile <u> </u> Temporary Fixed <u> </u> Aircraft <u> </u> Itinerant			
26) Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? See Section 1.1307 of 47 CFR. If 'Yes', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311. (<u>N</u>) <u>Yes</u> <u>No</u>			
27a) If the site is located in one of the Quiet Zones listed in Item 27b of the Instructions, provide the date (mm/dd/yyyy) that the proper Quiet Zone entity was notified:			
27b) Has the applicant obtained prior written consent from the proper Quiet Zone entity for the same technical parameters that are specified in this application? (<u>N</u>) <u>Yes</u> <u>No</u>			
28) Do you propose to operate in an area that requires frequency coordination with Mexico? (<u>N</u>) <u>Yes</u> <u>No</u>			

Technical Data Schedule for the
Private Land Mobile and Land Mobile Broadcast Auxiliary
Radio Services (Parts 90 and 74)Approved by OMB
3060 - 0798
See 601 Main Form Instructions
for public burden estimate

Eligibility

1) Rule Section: 90:20	2) Describe Activity: APPLICANT IS ENGAGED IN EMERGENCY SERVICES, RADIOS
----------------------------------	---

Frequency Coordinator Information (if not self-coordinated)

3) Frequency Coordination Number	4) Name of Frequency Coordinator	5) Telephone Number	6) Coordination Date
T17041314160580	APCO		
7) Has this application been successfully coordinated?			(<input checked="" type="checkbox"/>) <u>N</u> Yes/ <u>No</u>

Extended Implementation (Slow Growth)

8) Are you requesting a new or modified extended implementation plan? If 'Yes', attach an exhibit with a justification and a proposed station construction schedule.	(<input type="checkbox"/>) <u>Yes</u> / <u>No</u>
---	---

Associated Call Signs (Attach additional sheets if required)

9)				

Broadcast Auxiliary Only

If there is an associated Parent Station, complete Items 10-12.	10) Facility Id of Parent Station:	11) Radio Service of Parent Station: NA	12) City and State of Parent Station Principal Community:
13) If there is no associated parent station, this applicant is a: (<input type="checkbox"/>) <input checked="" type="checkbox"/> Broadcast Network Entity <input type="checkbox"/> Television Cable Operator <input type="checkbox"/> Motion Picture Producer <input type="checkbox"/> Television Producer			14) State of Primary Operation:

Control Point(s) (Other than at the transmitter) (Attach additional sheets if required)

15) Action A/M/D	16) Control Point Number	17) Location Street Address, City or Town, County/Borough/Parish, State	18) Telephone Number
A	1	705 2ND ST N, PRINCETON, MILLE LACS, MN	(763) 389-0993

[illegible]

[illegible]

FCC 601 - Schedule H



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[E-Filing](#) | [Initiatives](#) |
[Consumers](#) | [Find People](#)



Site / Frequency / Market Search Results

[Table Of Contents](#)

Site / Frequency / Market Search Results

Search Criteria: State = MN, Frequency = 806.5125 MHz, ^{8/11/91}Currently Licensed and Pending Facilities

Universal Licensing System Database - Sites						
Callsign: WQIU306	Licensee: Minnesota, State of	Radio Service: Public Safety Ntl Plan, 821-824/866-869 MHz, Trunked (YF)	City: Saint Paul, MN	Status: Active	Grant Date: 05/14/2008	Expiration: 05/14/2018
Site: 7		State: MN		County: ITASCA		
Frequency: 806.51250000						
Callsign: WQPB796	Licensee: MINNESOTA, STATE OF	Radio Service: PubSafty/SpecEmer/PubSaftyNtlPlan,806- 817/851-862MHz,Trunked (YE)	City: ROSEVILLE, MN	Status: Active	Grant Date: 03/30/2012	Expiration: 03/30/2022
Site: 7		Area of Operation: LM Control Station Meeting 6.1 Meter Rule		State: MN	County: BLUE EARTH	
Frequency: 806.51250000						
Callsign: WQPC373	Licensee: MINNESOTA, STATE OF	Radio Service: PubSafty/SpecEmer/PubSaftyNtlPlan,806- 817/851-862MHz,Trunked (YE)	City: ROSEVILLE, MN	Status: Active	Grant Date: 04/04/2012	Expiration: 04/04/2022
Site: 2	Name: MOORHEAD MO	Area of Operation: KMRA around a Fixed Location	City: Moorhead, MN	County: CLAY	Coordinates: 46° 53' 36.9" N, 96° 44' 17.9" W	
Frequency: 806.51250000						
Site: 8	Name: DULUTH MO	Area of Operation: KMRA around a Fixed Location	City: DULUTH, MN	County: ST. LOUIS	Coordinates: 46° 47' 26.0" N, 92° 6' 51.0" W	
Frequency: 806.51250000						
Site: 11		Area of Operation: LM Control Station Meeting 6.1 Meter Rule		State: MN	County: ST. LOUIS	
Frequency: 806.51250000						
Callsign: WQCV209	Licensee: SAINT LOUIS, COUNTY OF	Radio Service: PubSafty/SpecEmer/PubSaftyNtlPlan,806- 817/851-862MHz,Conv (GE)	City: DULUTH, MN	Status: Active	Grant Date: 03/10/2015	Expiration: 06/01/2025
Site: 2		State: MN				
Frequency: 806.51250000						

Universal Licensing System Site / Frequency Files: 4

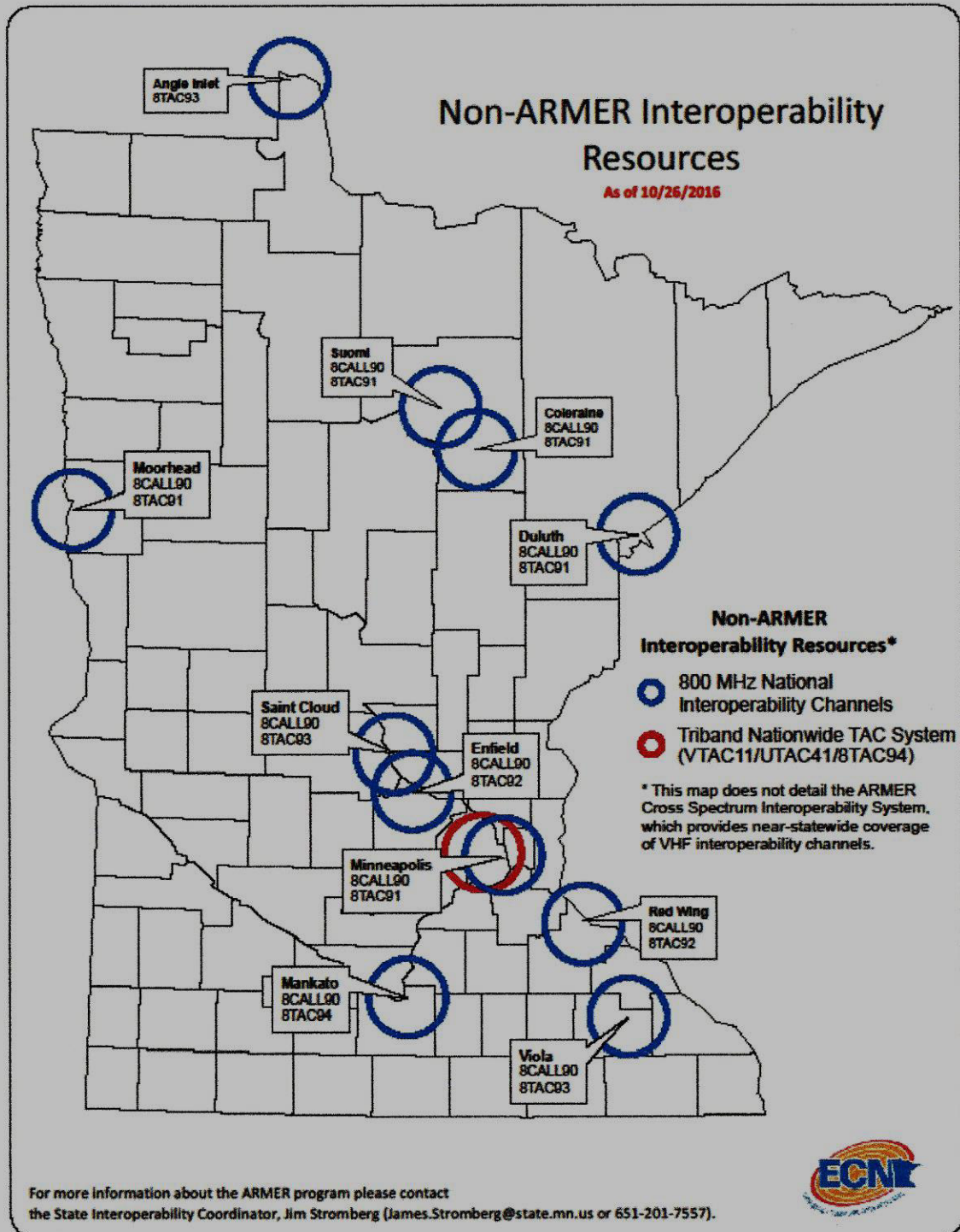
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Non-Federal National Interoperability Channels

Non-Federal National Interoperability Channels are available in the VHF, UHF, 700 MHz, and 800 MHz bands. The 800 MHz channels (8TACs) are most common in Minnesota as they are required to be programmed in all ARMER radios. Interoperability channels are available for any (routine, emergent, large- or small-scale) public safety interoperability purposes.

Non-Federal 800 MHz National Interoperability Channels Repeaters



Allied Radio Matrix for Emergency Response (ARMER)

Standards, Protocols, Procedures

Document Section 3	Interoperability Standards	Status: Approved
State Standard Number	3.47.0	
Standard Title	Conventional Resource ARMER Enhancement	
Date Established	02/23/2017	SECB Approval: 02/23/2017
Replaces Document Dated	n/a	
Date Revised	n/a	

1. Purpose or Objective

This standard authorizes local system administrators to establish radio patches between conventional RF (radio frequency) resources and dedicated ARMER talkgroups for the purpose of providing radio coverage in specifically-defined areas insufficiently served by the trunked ARMER network.

The options identified in this standard shall be known as *Conventional Resource ARMER Enhancement (CRAE)*.

2. Technical Background

▪ Capabilities

A connection between a strategically-placed gateway device programmed with a conventional channel and bridged to the ARMER network affords radio coverage in areas not well covered by ARMER.

▪ Constraints

The CRAE solutions offered in the standard are lower cost alternatives to more sophisticated options such as Signal Amplifiers (e.g. BDAs). Bridging a conventional channel to ARMER comes with a variety of limitations. Among them, the following should be considered:

- Conventional radio channels have limited range.
- The options identified in this standard are meant to enhance significant ARMER coverage deficits but the solution implemented may, itself, be imperfect.
- End users selected to the conventional channel will lose their ability to scan ARMER resources. While radios may be programmed to allow this functionality it is discouraged in standard #2.12.0 because of other technical limitations.
- When using a traditional patch as authorized in this standard, typically only voice is carried between the two systems being bridged. Functions such as emergency buttons and radio aliases may not pass between the systems.

- Traditional radio bridges create a short delay and may result in clipping of the first portion of a voice transmission. Care must be taken to pause between pushing the push-to-talk button and speaking.
- The conventional channel identified for the patch must be available in user radios.

Technical guidance should be applied before employing a CRAE solution so that emissions, coverage area, technical limitations and training needs are understood.

3. Operational Context

A conventional RF resource may be bridged to ARMER to provide supplemental radio coverage to a geographical area. The gateway device may be either fixed or mobile.

In the case of a fixed CRAE, the area to be served must be clearly defined and the RF solution should be engineered to provide for that area but not beyond it. The minimal power needed should be used. Talk-in and talk-out range and power output shall be balanced at a portable radio's 3-5 watt talkback range.

Since a conventional channel will be patched to an ARMER talkgroup and talkgroups are a finite resource, careful consideration should be given to design a CRAE so that multiple needs in one small geographic area are resolved with one CRAE solution rather than with multiple CRAE solutions.

The ARMER talk group used for a CRAE must be a local talk group dedicated exclusively to the patch.

In either a fixed or mobile CRAE, a simplex channel or a repeated channel may be employed and bridged to an ARMER talk group. The following conventional channels are authorized for use:

Locally Identified Frequencies – Simplex or Repeated

These channels may be used in a simplex or repeated configuration. They may be analog or digital and may not be encrypted. These channels may be used as dictated by their FCC license.

This option limits availability of this resource to only those who have the locally identified frequency programmed in to their radio.

7SOA-9 or 7SOA-10 (700 MHz) -- Simplex

These channels must be used in a simplex configuration; they may not be used in a repeated configuration. 7SOAs used as a CRAE must be digital and may not be encrypted. These channels may be used for routine, day-to-day business.

This option is available to all ARMER users however these channels are not required to be programmed in all ARMER radios.

SOA-3 or SOA-4 (800 MHz) -- Simplex

These channels must be used in a simplex configuration; they may not be used in a repeated configuration. SOAs must be digital and may not be encrypted. These channels may be used for routine, day-to-day business.

This option is available to all ARMER users.

800 MHz Non-Federal National Interoperability Channels (8TACs) -- Simplex

These channels may be used in a simplex or repeated configuration. This section defines their availability for use in a simplex configuration. They must be analog and may not be encrypted. Normally, these channels should not be used for routine, day-to-day business. These channels should be used for interoperability purposes.

This option is available to any public safety unit nationwide with an 800 MHz radio, including all ARMER users.

800 MHz Non-Federal National Interoperability Channels (8TACs) -- Repeated

These channels may be used in a simplex or repeated configuration. This section defines their availability for use in a repeated configuration. They must be analog and may not be encrypted. Normally, these channels should not be used for routine, day-to-day business. These channels should be used for interoperability purposes.

This option is available to any public safety unit nationwide with an 800 MHz radio, including all ARMER users. As repeated 8TACs are an interoperability asset, repeated 8TACs should be deployed to allow wide area coverage such as to a rural city or township.

4. Recommended Procedure

Local ARMER system administrators may implement CRAE to enhance coverage in areas insufficiently served by the trunked ARMER network.

The need or necessity for a CRAE channel to be programmed into radios will be determined by each agency. If an agency opts to not place this channel into their radios they will be responsible for any limitations on their ability to communicate within the CRAE coverage area.

Applications for fixed CRAE shall be submitted to the impacted Emergency Communications/Services region and then to the Operations and Technical Committee of the SECB for approvals. An impacted region is any region where the CRAE will be employed or any region within 30 air miles of where the CRAE will be employed.

Application for fixed CRAE shall include:

- A letter explaining the need for a CRAE.
- The intended coverage area and how the coverage footprint will be limited
- The agency who will be responsible for CRAE and contact information.
- A FCC License form 601 schedule D and schedule H showing the CRAE location and coverage.
- Other CRAE channels within a 30 air mile radius.

Users when entering into a fixed CRAE coverage area with the intent of using the resource will notify the governing dispatch agency. The agency will be responsible for its use during the event.

Mobile CRAE solutions may be incorporated into special-use command and communications vehicles or daily-use vehicles such as squad cars and ambulances. Mobile CRAE solutions do not need approval from the Operations and Technical Committee of the SECB. They must be programmed so that only one mobile repeater may be active in a geographical area at a time.

Established NAC and CTCSS tones must be used for all CRAE configurations.

6. Management

The local system administrator is responsible for all pieces of this process including technical matters, training, and licensing. The local system administrator is also responsible for coordinating with the Regional CASM (Communications Asset Survey Mapping) Administrator to add this resource to CASM and for coordinating with the SWIC (Statewide Interoperability Coordinator) to add this resource to the MNFOG (Minnesota Field Operations Guide).

METRO REGION

800 MHz Trunked Regional Public Safety Radio System

Standards, Protocols, Procedures

Document Section:	3 – Interoperability Guidelines	Radio TOC Recommendation
Sub-Section:	METRO 3.23.0	Date:
Procedure Title:	Connecting to the 800 MHz System	
Date Established:	3/16/01	MESB Approval - Signature:
Replaces Document Dated:	6/4/01	
Date Revised:	4/4/08	

1. Purpose or Objective

Procedure for connecting to the metro region 800 MHz radio system.

2. Operational Background:

▪ Capabilities

Users of conventional radios may communicate with radio users on the regional 800 MHz trunked radio system.

▪ Constraints

Conventional radio system users may only communicate on those common conventional radio channels that they are permitted to transmit on and available on an 800MHz console via a soft patch.

3. Operational Context:

The communications pathways may be used for day to day coordination, for urgent or emergency mutual aid situations, for task forces, tactical teams, and for other purposes. No new equipment is required; existing conventional radios can be used.

4. Recommended Protocol/ Standard:

- Permission from the MESB is **not** required to communicate by means of the existing conventional channels, such as MINSEF (MINSF VLaw31), National EMS (EMS VMed28), Statewide Fire Mutual Aid (SwFIRE VFire23) or MIMS. Conventional radio system users throughout the state of Minnesota (and many government conventional radio system users in Wisconsin) already have these frequencies in their radio systems. The specific frequency, or frequencies, in that list that are authorized for use in the radios depends upon the service of the owner agency for the radios.
- Base radio stations may not be added on the METTAC channels in geographic areas beyond the metro counties as the frequencies used for those channels are used elsewhere in greater Minnesota.
- Installation of new mobile and portable radios is not required as existing radio equipment can be used. However, use of the system can be enhanced by taking several steps:

- ✓ With authorization a radio technician can add the METTAC-A, METTAC-P mobile relay (repeater) and talk around channels to existing and new, mobile and portable radios.
 - ✓ With authorization agencies may add RF Control Stations operating on the METTAC-A, METTAC-P channels.
 - ✓ For METTAC-A and METTAC-P authorization may be received from the Office of Electronic Communications in the Minnesota Department of Transportation (*See Metro Standard 3.6.0—Use of the METTAC-P and METTAC-A*).
- Agencies may not add base mobile relay (repeater) radio stations on the METTAC-A, METTAC-P channels to avoid interference when two separate base transmitters are on the air at the same time.

5. Recommended Procedure:

Dispatch centers may request that conventional radio users switch to VHF MINSEF (MINSF VLaw31), National EMS (EMS VMed28), Statewide Fire Mutual Aid (SwFIRE VFire23), MIMS, METTAC-A, or METTAC-P. If the designated channel has not been installed in the mobile or portable radio being used, the radio user must inform the dispatch center operator of that fact.

Dispatch centers may attempt to select another interoperability resource that the radio user has available.

6. Management

Overall management of the regional public safety radio system is the responsibility of the Metropolitan Emergency Services Board, with operational management the responsibility of the Minnesota Department of Transportation.

The specific frequency, or frequencies, for the existing channels MINSEF (MINSF VLaw31), National EMS (EMS VMed28), Statewide Fire Mutual Aid (SwFIRE VFire23) or MIMS are authorized for use in radios by the managing agency for the specific channel:

- National EMS (EMS VMed28),
Statewide Radio Board
- MINSEF (MINSF VLaw31)
Statewide Radio Board
- Statewide Fire Mutual Aid (SwFIRE VFire23)
Statewide Radio Board
- MIMS-VHF
Statewide Radio Board

Allied Radio Matrix for Emergency Response Standards, Protocols, Procedures

Document Section 3	Interoperability Standards	Status: Complete
State Standard Number	3.7.0	
Standard Title	Recording Interoperability Channels and Talkgroups	
Date Established	06/01/2001	SECB Approval: 7/23/2009
Replaces Document Dated	09/15/2004	
Date Revised	06/01/2009	

1. Purpose or Objective

The purpose of this standard is to establish policy and procedure regarding the recording of interagency communications, including conventional radio frequency (RF) channels and common pool talkgroups.

This standard will also establish policy and procedure regarding recording of agency owned talkgroups.

2. Technical Background

▪ Capabilities

Conventional RF resources and talkgroups can be logged.

Interoperability talkgroup audio for logging can be reliably captured:

- At central logging Central Electronics Banks (CEBs) or MCC 7500 logging recorders, and are not dependent upon console activity, subscriber unit activity, zone affiliation or RF site affiliation.
- By using control stations, which are dependent on RF site affiliation and may affect loading of the utilized RF site.

Conventional audio can be pulled off of the system without consuming central logging CEB ports by accessing the audio from the analog side of the interoperability system.

▪ Constraints

Logging CEBs consume the Zone Audio Switch ports at the rate of 1 port for each 56 logged audio resources. The Audio Switch ports are in very limited supply and are presently also used for connecting dispatch centers into the system. An effort must be made to conserve the Audio Switch ports for agencies to be able to connect to the system.

The ARMER trunked talkgroup audio originates at the Master Sites. Conventional resource audio can originate at any Master Site or CEB. For logging of ARMER trunked talkgroups and many conventional resources, an audio path from a Master Site to the requesting logging location needs to be configured for each audio channel that is to be recorded.

Console logging audio outputs include transmit audio, select, and unselect receive audio. Console logging audio will only be available for talkgroups that are active at the console work position. Select receive audio will contain only one talkgroup or conventional resource. There is no information stored indicating which talkgroup or conventional resource was recorded from the select receive audio. Unselect audio may contain the audio from multiple talkgroups and/or conventional resources, resulting in the inability to understand any of the mixed audio that is recorded. There is no information stored indicating which talkgroup or conventional resource was recorded from the unselect receive audio.

3. Operational Context

Changes to talkgroups programmed for output from the central logger CEBs will need to be performed at the appropriate Master Site.

Other options for logging recorder audio sources are console logging audio outputs and RF control stations.

One RF control station can be used as a trunking receiver to receive all audio on one specific talkgroup. Multiple RF control stations, one for each specific talkgroup to be recorded, may be used at any one recording location. RF control stations can also be used to record encrypted talkgroups.

4. Recommended Protocol/ Standard

Remote logging to private owner CEBs shall be utilized as much as possible for any new logging requests, without adding additional private CEBs for logging.

New logging requests may negotiate with other owners to buy them off the central logging CEBs to relocate their logging locally. This provides vacated ports on the central logging CEBs for the new logging request.

The interoperability logging shall be left centralized. There are many agencies recording interoperability audio, and it is more cost effective to pull the audio from one location and then distribute the audio.

If no other logging solutions meet the need, a system-integrated solution may be required.

Each agency shall be responsible for determining which talkgroups and conventional resources they wish to record. They shall supply and manage their recorder and make arrangements with the regional System Administrator for routing the talkgroup audio to their recording facilities. Central logging CEB audio shall come off a CEB located in the home zone of the logged talkgroup.

As appropriate, the requesting agency shall coordinate with the Statewide Emergency Communications Board (SECB) for the cost of CEB logger port hardware and channel bank required

equipment to route audio from the master site to the dispatch location. Agencies shall be responsible for their own data retrieval.

Channel bank equipment installed at the Master Sites shall be owned and maintained by the State.

5. Recommended Procedure

The Statewide Emergency Communications Board will make the CEB audio port resource allocation and cost allocations as per State Standard 1.8.0, Changes and Upgrades. Requesting agencies will request logger audio port assignments from the Statewide Emergency Communications Board.

Changes to logger CEB outputs shall be requested through the Regional System Administrator.

For the central logging CEBs, the System Administrator shall coordinate talkgroup recording requests to prevent duplicate talkgroup logger output assignments. Logger audio for shared talkgroups shall be from a single logger audio CEB output and shall be routed to the different requesting agencies, e.g., mutual aid talkgroups, Emergency Medical Services (EMS) common channels, etc.

Logger audio for mutual aid talkgroups that are hard patched shall be taken from the analog side of the hard patch.

6. Management

The Statewide Emergency Communications Board is responsible for the allocation of logger ports and costs as appropriate.

The Regional System Administrator is responsible for the logger port programming, configuring of the channel banks, and system documentation.

METRO REGION
800 MHz Trunked Regional Public Safety Radio System
Standards, Protocols, Procedures

Document Section:	3 Interoperability Guidelines	TOC Recommended
Sub-Section:	METRO 3.1h	
Procedure Title:	Recording InterOp Channels & Talkgroups	Date: 5/24/01
Date Established:	4/16/01	
Replaces Document Dated:	9/15/04	MESB Approval:
Date Revised:	9/16/08	Date: 06/01/01

This standard was deleted pursuant to MESB action on October 8, 2008.

This standard was replaced by ARMER standard 3.1h on a statewide basis.

Please refer to the Statewide Radio Board's website for ARMER standards:
www.srb.state.mn.us

Allied Radio Matrix for Emergency Response Standards, Protocols, Procedures

Document Section:	3 - Interoperability Standards	Radio TOC Recommendation Date: 05/24/17
Sub-Section:	METRO 3.7.0	
Procedure Title:	Recording Interoperability Channels and Talkgroups	
Date Established:	05/24/2017	MESB Approval:
Replaces Document Dated:	n/a	
Date Revised:	n/a	

1. Purpose or Objective

The purpose of this standard is to establish policy and procedure regarding the recording of interagency communications, including conventional radio frequency (RF) channels and common pool talkgroups.

This standard will also establish policy and procedure regarding recording of agency owned talkgroups.

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- By using control stations, which are dependent on RF site affiliation and may affect loading of the utilized RF site

Conventional audio can be pulled off of the system without consuming central logging CEB ports by accessing the audio from the analog side of the interoperability system.

▪ Constraints

Logging CEBs consume the Zone Audio Switch ports at the rate of 1 port for each 56 logged audio resources. The Audio Switch ports are in very limited supply and are presently also used for connecting dispatch centers into the system. An effort must be made to conserve the Audio Switch ports for agencies to be able to connect to the system.

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If no other logging solutions meet the need, a system-integrated solution may be required.

Each agency shall be responsible for determining which talkgroups and conventional resources they wish to record. They shall supply and manage their recorder and make arrangements with the regional System Administrator for routing the talkgroup audio to their recording facilities. Central logging CEB audio shall come off a CEB located in the home zone of the logged talkgroup.

As appropriate, the requesting agency shall coordinate with the Statewide Radio Board (SRB) for the cost of CEB logger port hardware and channel bank equipment required to

route audio from the master site to the dispatch location. Agencies shall be responsible for their own data retrieval.

Channel bank equipment installed at the Master Sites shall be owned and maintained by the State.

5. Recommended Procedure

The Statewide Radio Board will make the CEB audio port resource allocation and cost allocations as per Section 1.8.0, Changes and Upgrades, of the standards. Requesting agencies will request logger audio port assignments from the Statewide Radio Board.

Changes to logger CEB outputs shall be requested through the regional System Administrator.

For the central logging CEBs, the System Administrator shall coordinate talkgroup recording requests to prevent duplicate talkgroup logger output assignments. Logger audio for shared talkgroups shall be from a single logger audio CEB output and shall be routed to the different requesting agencies, e.g., mutual aid talkgroups, Emergency Medical Services (EMS) common channels, etc.

Logger audio for mutual aid talkgroups that are hard patched shall be taken from the analog side of the hard patch.

6. Management

The Statewide Radio Board is responsible for the allocation of logger ports and costs as appropriate.

The Regional System Administrator is responsible for the logger port programming, configuring of the channel banks, and system documentation.

METRO REGION

800 MHz Trunked Regional Public Safety Radio System

Standards, Protocols, Procedures

Document Section:	3 – Interoperability Guidelines	Radio TOC Recommendation:
Sub-Section:	METRO 3.13.0	Date: 5/24/01
Procedure Title:	Nationwide 800 MHz Conventional Interoperability– 8CALL, 8TACs	
Date Established:	1/23/01	MESB Approval - Signature:
Replaces Document	11/7/07	
Dated:		
Date Revised:	3/26/08	06/01/01

1. Purpose or Objective

To establish procedures for the use of 800 MHz conventional mobile relay (two-frequency repeater) radio channels for intercommunications between radio users on different 800 MHz radio systems.

2. Operational Background:

▪ Capabilities

There are **five 800 MHz mobile relay frequency pairs that the FCC has assigned exclusively for interoperability communications between radio users on different 800 MHz radio systems**. One of these frequency pairs is reserved by the FCC as a calling channel, and the other four are reserved for intercommunications between radio users. The calling channel is named 8CALL90 and the other four channels are named 8TAC91, 8TAC92, 8TAC93, and 8TAC94. These frequency pairs are to be used with analog modulation in a 20 kHz bandwidth, mobile relay (repeater) mode and/or direct radio-to-radio “talk around” mode for scene of action interoperability. These frequency pairs may be licensed for use in any or all separate 800 MHz radio systems. The digital modulation radios that will be used in the new regional 800 MHz trunked radio system are capable of operating with analog modulation of 4.0 kHz.

The regional 800 MHz trunked radio system has **two mobile relay stations** each operating on one of these five frequency pairs with those stations located at the City Center site for maximum coverage area. One of those stations is on the calling frequency pair 8CALL90, and the other is 8TAC91. In addition to the region-wide mobile relay stations on 8CALL90 and 8TAC91, there is a sub-regional mobile relay station within Hennepin County on 8TAC94 consisting of 8 receiver sites and a transmitter site at Plymouth, MN. 8TAC94 is hardwired into a VHF/ UHF/ 800 MHz tri-band nationwide TAC channel system which can be soft patched to ARMER 800 MHz trunked talkgroups. This will facilitate not only communications

among different 800 MHz users within Hennepin County, but cross band among and between VHF and UHF users as well. There will also be transportable mobile relay stations on the other two frequency pairs.

▪ **Constraints**

If one or more of these frequency pairs is selected in a mobile or portable radio in the regional radio system, the radio user will lose the priority revert feature as part of the talk group scanning function.

The 8CALL90 and 8TAC radio frequencies are in the NPSPAC band of 800 MHz frequencies and mobile and portable radios must be able to function in compliance with NPSPAC specifications to use these channels.

There is only one transmitter on the 8CALL90 and one transmitter on the 8TAC91 channel located at the City Center Building site. There are 18 receivers scattered over nine counties with the best audio selected in a voting comparator on the receive side of the mobile relay. Therefore, the receive coverage geographic area is greater than the talk out geographic area. 8TAC94 coverage is generally limited to the areas in and immediately around Hennepin County.

Once a patchable resource is included in a manual (soft) patch, then that resource is not available for patching again. Only the dispatch operator who set up the manual patch can add or delete additional members to or from the manual patch.

3. Operational Context:

These 800 MHz interoperability frequency pairs may be used for day to day interagency coordination, for urgent or emergency mutual aid situations, and/or for task teams or for other purposes where coordination between radio users on separate 800 MHz radio systems must intercommunicate to perform assigned duties.

These frequency pairs shall not be used for intercommunications between radio users who are on the same radio system infrastructure.

4. Recommended Protocol/ Standard:

8CALL90 - FCC Calling Channel

<u>TG Requirements</u>	<u>For Whom?</u>
Highly Recommended	None
Recommended	All
Optional	None
Not Allowed	None

<u>Cross Patch Standard</u>	<u>YES / NO</u>	<u>To Talk Group(s)</u>
Soft Patch	Yes	Permitted Resources
Hard Patch	No	NA

8TACs Channels

<u>TG Requirements</u>	<u>For Whom?</u>
Highly Recommended	None
Recommended	All
Optional	None
Not Allowed	None

<u>Cross Patch Standard</u>	<u>YES / NO</u>	<u>To Talk Group(s)</u>
Soft Patch	Yes 8TAC91 through 4	Permitted Resources
Hard Patch	No	NA

- 8TAC94 may be temporarily (soft) patched to the HCOMMON talkgroup or another selected talkgroup so that trunked radio users can scan that channel without losing the priority revert feature.
- 8TAC91 shall not be included in a permanent (hard) patch in order to provide the ability to place 8TAC91 into a manual (soft) patch by any dispatch console operator as detailed later in this document
- It is recommended that all radio users on other 800 MHz radio systems have the 8CALL90, 8TAC91, 8TAC92, 8TAC93 and 8TAC94 channels in selector slots on all of the mobile and portable radios used by law enforcement, fire and EMS personnel. It is recommended that public service personnel using these other 800 MHz radio systems also have 8CALL, and 8TAC91 programmed into the radios used.
- Agencies using the regional 800 MHz radio system may also have the conventional 8CALL90 and 8TAC91-94 mobile relay stations included in their fleet maps. These are for use when travelling outside the coverage area of the regional 800 MHz radio system but into another 800 MHz system with base radio facilities on those channels.
- The Primary PSAP regional dispatch centers shall monitor the 8CALL90 channel at all times and be equipped to transmit on these channels. The 8CALL90 channel may be monitored in any other dispatch center and/or by as many dispatch center operators as the system manager responsible for managing the center selects.

- The 8CALL90 and 8TAC91 conventional mobile relay stations shall be recorded. For details see *Section 3.1f Recording Interagency Talk Groups*.
- Transportable mobile relay stations on the 8TAC92 and 3 conventional channels may be installed in mobile command posts. **No agency shall utilize a transportable mobile relay station on 8CALL90, 8TAC91 or 8TAC94 to avoid interference with the fixed stations on those channels.**
- Any government entity using an 800 MHz radio system may add a repeater talk around radio channel in radios on the 8TAC conventional channels.
- The talk around 8TAC radio channels are also available for use with on scene cross band repeat or cross band patch operations such as VHF to 800 MHz or UHF to 800 MHz.

5. Recommended Procedure:

Most of the time, an event that requires agency coordination will begin on the main dispatch radio channel of one of the public safety dispatch centers. **The dispatch center operator that handles the event initially shall become the responsible dispatch operator and shall provide dispatch service to all personnel in all units participating in the event activities.**

- **If that dispatch center is on the regional 800 MHz radio system, and coordination is required with personnel in units on another 800 MHz radio system**, the responsible dispatch center operator shall tell the units in his or her agency that are involved in the event to switch to the 8TAC91 trunked talk group and initiate a manual (soft) patch between the talk group and the 8TAC91 conventional repeater channel. The dispatch center operator that set up the soft patch shall be responsible for breaking the soft patch when there is no further need for the patch.
- **If the responsible dispatch center operator is on a VHF or UHF radio system, and personnel in units on multiple 800 MHz radio system are also involved**, either:
 - ✓ The responsible dispatch center operator shall soft patch a VHF/UHF mutual aid channel to the conventional 8TAC91 mobile relay station, or
 - ✓ Ask a dispatch center operator in another dispatch center with the capability to create the soft patch, and proceed as described in the above paragraph.
- **If agency coordination is required for a time period longer than a few hours**, or if the area where the 800 MHz to 800 MHz agency coordination is needed **does not have good network coverage**, one of the transportable mobile relay stations in a mobile communications van shall be sent to the area of the event operations. Communications shall then be reassigned from 8TAC91 to 8TAC92 or 3.
- **If a government radio user from outside the metropolitan Minneapolis-St. Paul geographic area that is using an 800 MHz radio system comes into the area and**

needs assistance, that outside radio user may call on the 8CALL90 channel. The called unit and/or State Patrol dispatch center operator shall respond to that call.

- ✓ If the requested PSAP does not respond to the 8CALL90 call, a Hennepin County Sheriff's dispatch or any other dispatch center operator shall respond and serve the caller.

6. Management

Any 800 MHz radio system user may obtain a license for mobile and portable radio use of the 8CALL90 and 8TAC radio channels.

Dispatch center managers for 800 MHz radio systems with access to the 8TAC91 channel, or a talk group patchable to that channel, shall prepare procedures for use of the 8TAC91 channel that is consistent with this procedure.

Dispatch center managers shall prepare and conduct initial and continuing training for dispatch center operators on the procedures that are established for use of the 8CALL90 and 8TAC channels that are consistent with this procedure.

Responsibility for monitoring the use of and for recommending modifications to this procedure shall be a function of the Radio Technical Operations Committee.

METRO REGION

800 MHz Trunked Regional Public Safety Radio System Standards, Protocols, Procedures

Document Section:	3 – Interoperability Guidelines	Radio TOC Recommendation:
Sub-Section:	METRO 3.13.0	Date: 5/24/01
Procedure Title:	Nationwide 800 MHz Conventional Interoperability- 8CALL, 8TACs	
Date Established:	1/23/01	MESB Approval - Signature:
Replaces Document	11/7/07 3/26/08	
Dated:		
Date Revised:	3/26/08 5/24/07	06/01/01

1. Purpose or Objective

To establish procedures for the use of 800 MHz conventional mobile relay (two-frequency repeater) radio channels for intercommunications between radio users on different 800 MHz radio systems.

2. Operational Background:

▪ Capabilities

There are **five 800 MHz mobile relay frequency pairs that the FCC has assigned exclusively for interoperability communications between radio users on different 800 MHz radio systems**. One of these frequency pairs is reserved by the FCC as a calling channel, and the other four are reserved for intercommunications between radio users. The calling channel is named 8CALL90 and the other four channels are named 8TAC91, 8TAC92, 8TAC93, and 8TAC94. These frequency pairs are to be used with analog modulation in a 20 kHz bandwidth, mobile relay (repeater) mode and/or direct radio-to-radio “talk around” mode for scene of action interoperability. These frequency pairs may be licensed for use in any or all separate 800 MHz radio systems. The digital modulation radios that will be used in the new regional 800 MHz trunked radio system are capable of operating with analog modulation of 4.0 kHz.

The regional 800 MHz trunked radio system has **two mobile relay stations** each operating on one of these five frequency pairs with those stations located at the City Center site for maximum coverage area. One of those stations is on the calling frequency pair 8CALL90, and the other is 8TAC91. In addition to the region-wide mobile relay stations on 8CALL90 and 8TAC91, there is a sub-regional mobile relay station within Hennepin County on 8TAC94 consisting of 8 receiver sites and a transmitter site at Plymouth, MN. 8TAC94 is hardwired into a VHF/ UHF/ 800 MHz tri-band nationwide TAC channel system which can be soft patched to ARMER 800 MHz trunked talkgroups. This will facilitate not only communications

among different 800 MHz users within Hennepin County, but cross band among and between VHF and UHF users as well. There will also be transportable mobile relay stations on the other two frequency pairs.

■ Constraints

If one or more of these frequency pairs is selected in a mobile or portable radio in the regional radio system, the radio user will lose the priority revert feature as part of the talk group scanning function.

The 8CALL90 and 8TAC radio frequencies are in the NPSPAC band of 800 MHz frequencies and mobile and portable radios must be able to function in compliance with NPSPAC specifications to use these channels.

There is only one transmitter on the 8CALL90 and one transmitter on the 8TAC91 channel located at the City Center Building site. There are 18 receivers scattered over nine counties with the best audio selected in a voting comparator on the receive side of the mobile relay. Therefore, the receive coverage geographic area is greater than the talk out geographic area. 8TAC94 coverage is generally limited to the areas in and immediately around Hennepin County.

Once a patchable resource is included in a manual (soft) patch, then that resource is not available for patching again. Only the dispatch operator who set up the manual patch can add or delete additional members to or from the manual patch.

3. Operational Context:

These 800 MHz interoperability frequency pairs may be used for day to day interagency coordination, for urgent or emergency mutual aid situations, and/or for task teams or for other purposes where coordination between radio users on separate 800 MHz radio systems must intercommunicate to perform assigned duties.

These frequency pairs shall not be used for intercommunications between radio users who are on the same radio system infrastructure.

4. Recommended Protocol/ Standard:

8CALL90 - FCC Calling Channel

<u>TG Requirements</u>	<u>For Whom?</u>
Highly Recommended	None
Recommended	All
Optional	None
Not Allowed	None

<u>Cross Patch Standard</u>	<u>YES / NO</u>	<u>To Talk Group(s)</u>
Soft Patch	Yes	Permitted Resources
Hard Patch	No	NA

8TACs Channels

<u>TG Requirements</u>	<u>For Whom?</u>
Highly Recommended	None
Recommended	All
Optional	None
Not Allowed	None

<u>Cross Patch Standard</u>	<u>YES / NO</u>	<u>To Talk Group(s)</u>
Soft Patch	Yes 8TAC91 through 4	Permitted Resources
Hard Patch	No	NA

- 8TAC94 may be temporarily (soft) patched to the HCOMMON talkgroup or another selected talkgroup so that trunked radio users can scan that channel without losing the priority revert feature.
- 8TAC91 shall not be included in a permanent (hard) patch in order to provide the ability to place 8TAC91 into a manual (soft) patch by any dispatch console operator as detailed later in this document
- It is recommended that all radio users on other 800 MHz radio systems have the 8CALL90, 8TAC91, 8TAC92, 8TAC93 and 8TAC94 channels in selector slots on all of the mobile and portable radios used by law enforcement, fire and EMS personnel. It is recommended that public service personnel using these other 800 MHz radio systems also have 8CALL, and 8TAC91 programmed into the radios used.
- Agencies using the regional 800 MHz radio system may also have the conventional 8CALL90 and 8TAC91-94 mobile relay stations included in their fleet maps. These are for use when travelling outside the coverage area of the regional 800 MHz radio system but into another 800 MHz system with base radio facilities on those channels.
- The Primary PSAP regional dispatch centers shall monitor the 8CALL90 channel at all times and be equipped to transmit on these channels. The 8CALL90 channel may be monitored in any other dispatch center and/or by as many dispatch center operators as the system manager responsible for managing the center selects.

- The 8CALL90 and 8TAC91 conventional mobile relay stations shall be recorded. For details see *Metro Standard Section 3.7.0-4 Recording Interoperability Interagency Talk Groups*.
- Transportable mobile relay stations on the 8TAC92 and 3 conventional channels may be installed in mobile command posts. **No agency shall utilize a transportable mobile relay station on 8CALL90, 8TAC91 or 8TAC94 to avoid interference with the fixed stations on those channels.**
- Any government entity using an 800 MHz radio system may add a repeater talk around radio channel in radios on the 8TAC conventional channels.
- The talk around 8TAC radio channels are also available for use with on scene cross band repeat or cross band patch operations such as VHF to 800 MHz or UHF to 800 MHz.

5. Recommended Procedure:

Most of the time, an event that requires agency coordination will begin on the main dispatch radio channel of one of the public safety dispatch centers. **The dispatch center operator that handles the event initially shall become the responsible dispatch operator and shall provide dispatch service to all personnel in all units participating in the event activities.**

- **If that dispatch center is on the regional 800 MHz radio system, and coordination is required with personnel in units on another 800 MHz radio system**, the responsible dispatch center operator shall tell the units in his or her agency that are involved in the event to switch to the 8TAC91 trunked talk group and initiate a manual (soft) patch between the talk group and the 8TAC91 conventional repeater channel. The dispatch center operator that set up the soft patch shall be responsible for breaking the soft patch when there is no further need for the patch.
- **If the responsible dispatch center operator is on a VHF or UHF radio system, and personnel in units on multiple 800 MHz radio system are also involved**, either:
 - ✓ 1. The responsible dispatch center operator shall soft patch a VHF/UHF mutual aid channel to the conventional 8TAC91 mobile relay station, or
 - ✓ 2. Ask a dispatch center operator in another dispatch center with the capability to create the soft patch, and proceed as described in the above paragraph.
- **If agency coordination is required for a time period longer than a few hours**, or if the area where the 800 MHz to 800 MHz agency coordination is needed **does not have good network coverage**, one of the transportable mobile relay stations in a mobile communications van shall be sent to the area of the event operations. Communications shall then be reassigned from 8TAC91 to 8TAC92 or **8TAC93**.

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• **If a government radio user from outside the metropolitan Minneapolis-St. Paul geographic area that is using an 800 MHz radio system comes into the area and needs assistance**, that outside radio user may call on the 8CALL90 channel. The called unit and/or State Patrol dispatch center operator shall respond to that call.

✓ If the requested PSAP does not respond to the 8CALL90 call, a Hennepin County Sheriff's dispatch or any other dispatch center operator shall respond and serve the caller.

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6. Management

Any 800 MHz radio system user may obtain a license for mobile and portable radio use of the 8CALL90 and 8TAC radio channels.

Dispatch center managers for 800 MHz radio systems with access to the 8TAC91 channel, or a talk group patchable to that channel, shall prepare procedures for use of the 8TAC91 channel that is consistent with this procedure.

Dispatch center managers shall prepare and conduct initial and continuing training for dispatch center operators on the procedures that are established for use of the 8CALL90 and 8TAC channels that are consistent with this procedure.

Responsibility for monitoring the use of and for recommending modifications to this procedure shall be a function of the Radio Technical Operations Committee.

METRO REGION

800 MHz Trunked Regional Public Safety Radio System

Standards, Protocols, Procedures

Document Section:	3 – Interoperability Guidelines	Radio TOC Recommendation:
Sub-Section:	METRO 3.13.0	Date: 5/24/01
Procedure Title:	Nationwide 800 MHz Conventional Interoperability– 8CALL, 8TACs	
Date Established:	1/23/01	MESB Approval - Signature:
Replaces Document	3/26/08	
Dated:		
Date Revised:	5/24/17	06/01/01

1. Purpose or Objective

To establish procedures for the use of 800 MHz conventional mobile relay (two-frequency repeater) radio channels for intercommunications between radio users on different 800 MHz radio systems.

2. Operational Background:

▪ Capabilities

There are **five 800 MHz mobile relay frequency pairs that the FCC has assigned exclusively for interoperability communications between radio users on different 800 MHz radio systems**. One of these frequency pairs is reserved by the FCC as a calling channel, and the other four are reserved for intercommunications between radio users. The calling channel is named 8CALL90 and the other four channels are named 8TAC91, 8TAC92, 8TAC93, and 8TAC94. These frequency pairs are to be used with analog modulation in a 20 kHz bandwidth, mobile relay (repeater) mode and/or direct radio-to-radio “talk around” mode for scene of action interoperability. These frequency pairs may be licensed for use in any or all separate 800 MHz radio systems. The digital modulation radios that will be used in the new regional 800 MHz trunked radio system are capable of operating with analog modulation of 4.0 kHz.

The regional 800 MHz trunked radio system has **two mobile relay stations** each operating on one of these five frequency pairs with those stations located at the City Center site for maximum coverage area. One of those stations is on the calling frequency pair 8CALL90, and the other is 8TAC91. In addition to the region-wide mobile relay stations on 8CALL90 and 8TAC91, there is a sub-regional mobile relay station within Hennepin County on 8TAC94 consisting of 8 receiver sites and a transmitter site at Plymouth, MN. 8TAC94 is hardwired into a VHF/ UHF/ 800 MHz tri-band nationwide TAC channel system which can be soft

patched to ARMER 800 MHz trunked talkgroups. This will facilitate not only communications among different 800 MHz users within Hennepin County, but cross band among and between VHF and UHF users as well. There will also be transportable mobile relay stations on the other two frequency pairs.

▪ **Constraints**

If one or more of these frequency pairs is selected in a mobile or portable radio in the regional radio system, the radio user will lose the priority revert feature as part of the talk group scanning function.

The 8CALL90 and 8TAC radio frequencies are in the NPSPAC band of 800 MHz frequencies and mobile and portable radios must be able to function in compliance with NPSPAC specifications to use these channels.

There is only one transmitter on the 8CALL90 and one transmitter on the 8TAC91 channel located at the City Center Building site. There are 18 receivers scattered over nine counties with the best audio selected in a voting comparator on the receive side of the mobile relay. Therefore, the receive coverage geographic area is greater than the talk out geographic area. 8TAC94 coverage is generally limited to the areas in and immediately around Hennepin County.

Once a patchable resource is included in a manual (soft) patch, then that resource is not available for patching again. Only the dispatch operator who set up the manual patch can add or delete additional members to or from the manual patch.

3. Operational Context:

These 800 MHz interoperability frequency pairs may be used for day to day interagency coordination, for urgent or emergency mutual aid situations, and/or for task teams or for other purposes where coordination between radio users on separate 800 MHz radio systems must intercommunicate to perform assigned duties.

These frequency pairs shall not be used for intercommunications between radio users who are on the same radio system infrastructure.

4. Recommended Protocol/ Standard:

8CALL90 - FCC Calling Channel

<u>TG Requirements</u>	<u>For Whom?</u>
Highly Recommended	None
Recommended	All
Optional	None
Not Allowed	None

<u>Cross Patch Standard</u>	<u>YES / NO</u>	<u>To Talk Group(s)</u>
Soft Patch	Yes	Permitted Resources
Hard Patch	No	NA

8TACs Channels

<u>TG Requirements</u>	<u>For Whom?</u>
Highly Recommended	None
Recommended	All
Optional	None
Not Allowed	None

<u>Cross Patch Standard</u>	<u>YES / NO</u>	<u>To Talk Group(s)</u>
Soft Patch	Yes 8TAC91 through 4	Permitted Resources
Hard Patch	No	NA

- 8TAC94 may be temporarily (soft) patched to the HCOMMON talkgroup or another selected talkgroup so that trunked radio users can scan that channel without losing the priority revert feature.
- 8TAC91 shall not be included in a permanent (hard) patch in order to provide the ability to place 8TAC91 into a manual (soft) patch by any dispatch console operator as detailed later in this document
- It is recommended that all radio users on other 800 MHz radio systems have the 8CALL90, 8TAC91, 8TAC92, 8TAC93 and 8TAC94 channels in selector slots on all of the mobile and portable radios used by law enforcement, fire and EMS personnel. It is recommended that public service personnel using these other 800 MHz radio systems also have 8CALL, and 8TAC91 programmed into the radios used.
- Agencies using the regional 800 MHz radio system may also have the conventional 8CALL90 and 8TAC91-94 mobile relay stations included in their fleet maps. These are for use when travelling outside the coverage area of the regional 800 MHz radio system but into another 800 MHz system with base radio facilities on those channels.
- The Primary PSAP regional dispatch centers shall monitor the 8CALL90 channel at all times and be equipped to transmit on these channels. The 8CALL90 channel may be monitored in any other dispatch center and/or by as many dispatch center operators as the system manager responsible for managing the center selects.
- The 8CALL90 and 8TAC91 conventional mobile relay stations shall be recorded. For details see *Metro Standard 3.7.0 Recording Interoperability Talk Groups*.

- Transportable mobile relay stations on the 8TAC92 and 3 conventional channels may be installed in mobile command posts. **No agency shall utilize a transportable mobile relay station on 8CALL90, 8TAC91 or 8TAC94 to avoid interference with the fixed stations on those channels.**
- Any government entity using an 800 MHz radio system may add a repeater talk around radio channel in radios on the 8TAC conventional channels.
- The talk around 8TAC radio channels are also available for use with on scene cross band repeat or cross band patch operations such as VHF to 800 MHz or UHF to 800 MHz.

5. Recommended Procedure:

Most of the time, an event that requires agency coordination will begin on the main dispatch radio channel of one of the public safety dispatch centers. **The dispatch center operator that handles the event initially shall become the responsible dispatch operator and shall provide dispatch service to all personnel in all units participating in the event activities.**

- **If that dispatch center is on the regional 800 MHz radio system, and coordination is required with personnel in units on another 800 MHz radio system,** the responsible dispatch center operator shall tell the units in his or her agency that are involved in the event to switch to the 8TAC91 trunked talk group and initiate a manual (soft) patch between the talk group and the 8TAC91 conventional repeater channel. The dispatch center operator that set up the soft patch shall be responsible for breaking the soft patch when there is no further need for the patch.
- **If the responsible dispatch center operator is on a VHF or UHF radio system, and personnel in units on multiple 800 MHz radio system are also involved,** either:
 1. The responsible dispatch center operator shall soft patch a VHF/UHF mutual aid channel to the conventional 8TAC91 mobile relay station, or
 2. Ask a dispatch center operator in another dispatch center with the capability to create the soft patch, and proceed as described in the above paragraph.
- **If agency coordination is required for a time period longer than a few hours,** or if the area where the 800 MHz to 800 MHz agency coordination is needed **does not have good network coverage,** one of the transportable mobile relay stations in a mobile communications van shall be sent to the area of the event operations. Communications shall then be reassigned from 8TAC91 to 8TAC92 or 8TAC93.
- **If a government radio user from outside the metropolitan Minneapolis-St. Paul geographic area that is using an 800 MHz radio system comes into the area and needs assistance,** that outside radio user may call on the 8CALL90 channel. The called unit and/or State Patrol dispatch center operator shall respond to that call. If the

requested PSAP does not respond to the 8CALL90 call, a Hennepin County Sheriff's dispatch or any other dispatch center operator shall respond and serve the caller.

6. Management

Any 800 MHz radio system user may obtain a license for mobile and portable radio use of the 8CALL90 and 8TAC radio channels.

Dispatch center managers for 800 MHz radio systems with access to the 8TAC91 channel, or a talk group patchable to that channel, shall prepare procedures for use of the 8TAC91 channel that is consistent with this procedure.

Dispatch center managers shall prepare and conduct initial and continuing training for dispatch center operators on the procedures that are established for use of the 8CALL90 and 8TAC channels that are consistent with this procedure.

Responsibility for monitoring the use of and for recommending modifications to this procedure shall be a function of the Radio Technical Operations Committee.