

Berks County Department of Emergency Services

Communications Division
Standard Operating Procedures Overview
June 2014



As per June 4, 2014 SOP Revision

End User Training is CRUCIAL

- Accurate and thorough training and re-training. Do NOT cut corners.
- Understand each disciplines and how it functions.
- This is only an overview. Read the manual in its entirety and ask questions.
- This is, and will continue to be a work in progress. Changes and modifications will occur as we all learn about the system and its use.

General Radio System Operations and Security

- Authorized system users, who have been trained and possess the required radio equipment, are permitted to operate on the Radio System
- Inappropriate or unauthorized use of the Radio System will not be tolerated.
- Any report of lost, stolen or missing radios shall be directed to the on duty Watch Officer.
- A system user who reports any type of system trouble shall be directed to the on duty Watch Officer.

Conventional vs. Trunking

- Uses a dedicated radio frequency for each radio channel in a system.

- Each frequency is assigned to a group of users.

- A channel (33.94) = A frequency (Low Band County Fire)



- The sharing of a limited number of communications paths among many users.

- Uses a group of similar radio frequencies to create a “pool” for radio users to access.

- A channel is now referred to as “Talk Group”

Trunked System Talk Groups

- **Categories:**

- Dispatch – Receive Only Talk Group
- Hailing – Primary radio communications path between users and radio operators
- Operations – Used for major incidents, pre-planned events, or extreme business.
- Administrative – convenience of the users and certain specific agencies.



Other Radio Talk Groups

- Conventional Interoperability Channels – for out of county mutual aid units. This is a permanent patch between previously used *Frequencies* and current *Talk Groups*.
- Conventional Tactical Channels – for on-scene, off trunked systems communications.



Continuity of Operations

- Detailed information regarding system failure/outages, whether planned or unplanned, and how they are to be handled.
- All attempts will be made to notify systems users of outages, both field users and DES staff members.
 - CAD, WebCAD, MCT's, Fire/EMS paging & back up paging, text paging, Radio system, telephone issues, DES evacuation, and personnel shortage.



General Radio System Operations

- ✓ FCC Regulations
- ✓ Radio Etiquette
- ✓ Approved Agency and Unit Identifiers
- ✓ Urgent Traffic
- ✓ Plan Charlie (SCCP)

FCC REGULATIONS

- Users must adhere to all FCC regulations
- Proper call signs
- 24-hour military time
- Plain language must be used whenever practical.



RADIO ETIQUETTE/ PROFESSIONALISM

- Speak slowly and clearly directly into the mic.
 - Ensure no loud noises are behind you.
- Wait briefly after PTT to ensure the resource is assigned and to avoid clipping.

Approved Agency and Unit Identifiers

- Law enforcement identifiers are organization number and agency-assigned unit type.
- EMS identifiers are organization number, station number, and the apparatus or unit position identifier.
 - Western Berks Station 3 Medic Truck 5 = Medic 650-3-5
- Fire identifiers are dependent on jurisdiction. County Fire identifiers use organization number.
- Clarity is the desired outcome. Common language unit identifier is always acceptable.
 - “Reading City Medic 1” or “Reading City Patrol Unit 306” are permissible.

Urgent Traffic

- Use “URGENT TRAFFIC” when recipient is to discontinue other actions except related to immediate life threatening circumstance.
 - May be used on any Channel or Talk Group and should always be directed to a DES Radio, other system user, etc.
- **PRIORITY shall not be used in place of URGENT TRAFFIC.**
- **URGENT TRAFFIC transmissions shall always be sent in four-part messaging.**

Special Circumstances Contingency Planning (Plan Charlie)

- Emergency services dispatch plan during severe weather or other extenuating circumstances.
 - Authorized by DES on duty Watch Officer
- Notifications made via Hailing Talk Groups for Police Fire and EMS at implementation and termination of the SCCP.
- Procedure modifications will be in place during the event for each disciple.



Additional Operations Talk Groups

- ✓ Tactical Channels
- ✓ Disaster Operations
- ✓ Countywide Operations
- ✓ Public Works Operations
- ✓ Non- Reading Agency Specific Operations
- ✓ Reading Agency Specific Operations
- ✓ Countywide Intraoperability
- ✓ County Emergency
- ✓ Reading Emergency

Tactical Channels

- 12 Tactical Channels exist.
- Brks7Tac1 through Brks7Tac12 (referred to as Berks Tac1 – Berks Tac12)
- “Point to point” channels for incident, on-scene, communications.
- ALL public safety radios provisioned on the system have access to the Tactical Channels.
- Radio Operator will document the Tactical Channel assigned and the designator of the requestor.

Purpose:

To use in areas of unreliable system coverage such as inside buildings. Also on scene small scale operations.

Special Operations Talk Groups

- ✓ Disaster Operations Talk Group = Disaster N1
 - ✓ Exceptionally large multi-discipline incidents or events
 - ✓ 5 North Site Talk Groups, 5 South Site Talk Groups, and 5 Countywide Talk Groups
- ✓ Countywide Exercise Operations Talk Groups = BrksExerCW
 - ✓ Used for communications during large scale multi-jurisdictional/ multi-discipline training events.

Special Operations Talk Groups

- ✓ Public Work Operations Talk Groups
 - ✓ These Talk Groups are intended for future expansion and will not be used without DES approval.
 - ✓ 13 Talk Groups are available for expansion.

Special Operations Talk Groups



- ✓ Non- Reading Agency Specific Operations Talk Groups
 - ✓ Used by entities outside of the primary Municipal/regional Police, Fire and EMS System Users.
 - ✓ Use of these Talk Groups MUST comply with DES policies and FCC Regulations.
 - ✓ Conduct day to day and incident operations.
 - ✓ Coroner, CH Sec, DA, DES, Heim, IFS, Jail, Parks, Probation & Parole, Red Cross, Sheriff

Special Operations Talk Groups

- ✓ Reading Agency Specific Operations Talk Groups
 - ✓ Used by specific agencies in the City of Reading for day to day and incident communications.
 - ✓ Reading Police Dispatch, Reading Streets, Downtown Improvement District (DID), etc.
- ✓ All use of these Talk Groups MUST comply with any overarching policies set forth by DES and FCC regulations
- ✓ Telepatch Operations Talk Groups
 - ✓ Used as a last resort in the unusual circumstance that a field user needs to be placed in contact with a specific party by telephone.
 - ✓ Does NOT provide the same degree of privacy as a cellular phone call.
 - ✓ TelePatchADP – Non- Law Enforcement use



Countywide Intraoperability Talk Groups

- A single point of calling for all System Users to reach each other was created.
- It is intended to be used by any System User attempting to reach any other System User but not sure which Talk Group they are assigned.
- **CWIntraOp**
 - *Ex. Spring Twp Police need to make contact with Exeter Police, they are unaware of which TG they are assigned to and use BrksPDIntraOp to call Exeter Police and make contact with a 25 unit.*



County Emergency Talk Group

- A “Revert” Talk Group for Emergency Button Activations (EBA)
 - County EMERG
- Must meet 3 parameters for EBA to be automatically redirected.
 - Not configured for Tactical Emergency
 - Not a City of Reading User
 - Not to revert to another specified Talk Group
- ONLY to be used for handling of emergencies that revert to this Talk Group.



Reading Emergency Talk Group

- A “Revert” Talk Group for Emergency Button Activations (EBA)
 - RdgEMERG (Reading Emergency)
- Must meet 3 parameters for EBA to be automatically redirected.
 - Not configured for Tactical Emergency
 - Primarily a City of Reading User
 - Not to revert to another specified Talk Group
- ONLY to be used for handling of emergencies that revert to this Talk Group.



Procedures Governing System Features

- Scanning
- DVRS
- Busy Process
- Talk Timer
- Emergency Button Activation

Scanning

- Scanning allows Users to set radio to “hear” communications that are being transmitted on TGs and Channels that the radio is NOT selected on.
- Every system radio has several separate Scan lists available
 - Trunked Scan List
 - Disaster Scan List
 - Conventional Scan List
- Scan lists can be edited.
- Scanning is NEVER a guarantee that traffic will not be missed.
- Mobile radios have special functions that differ from portable radios.

Digital Vehicle Repeater Operations

- Digital Vehicular Repeater Systems (DVRSs) --a radio repeater that accepts an input from portable radios on a conventional channel and retransmits input over a connected mobile radio set to a specific TG.
- Two reasons for using a DVRS:
 - Portables can be used in areas where there is mobile coverage but not portable system coverage.
 - Portable can be used inside a structure where there is no System coverage by relaying through a DVRS in a vehicle parked outside of the building.

Busy Process

- High usage of the trunked radio system could cause a user to receive a System Busy Tone.
- Upon receiving Busy Tone, User **MUST NOT** continue to press PTT button.
- When a talk path becomes available, Talk Permit Tone is received and User should immediately push the PTT button and send transmission.
 - Normal time in queue should be under 2 seconds

Talk Timer



- System will deny the User's ability to transmit a message longer than 60 continuous seconds.
 - 56 seconds after beginning transmission, User will receive notification tone indicating Time Out Timer will be expiring in 4 seconds.
 - If User fails to unkey within 4 seconds, a continuous tone will be heard and transmission will be stopped.

Emergency Button Activation (EBA)

- ONLY initiated in an unanticipated situation posing immediate threat to User's personal safety!
- Depress and holding button for 1/2 second to activate.
 - TGs are programmed to either have EBAs remain on the TG (Tactical) or to switch to a monitored TG called an Emergency Revert TG.
- A unit that performed an intentional activation shall, to the extent possible, immediately respond with details to permit appropriate resources be sent to assist.
- Accidental activations will be confirmed and emergency button immediately reset.



Emergency Button Activation (EBA)

- Unverified Activation – System User does not respond to DES radio contact
 - DES will make 2 attempts via radio to contact System User that initiated their Emergency Button Activation.
 - Handled as a failed security check
 - Send back up if location is known
 - Advise on duty Watch Officer
 - Remote Monitor



Emergency Button Activation (EBA)

- Unverified EBA's (CH Security, County Maintenance, Heim Security, etc.)
 - Non- Reading Users
 - Non-Public Safety Users
- Agencies must maintain a telephone contact list for supervisory personnel on file with DES.
- DES will support these activations by dispatching law enforcement if a location is known and try to reach other Users through the radio or by telephone.

Emergency Button Activation (EBA)

- Jail Emergency Button Activation
 - EBAs on the following TGs are handled by control personnel at the Jail without involvement of DES:
 - BrksJail Mnt
 - BrksJail Sup
 - BrksJail CRC
 - Brks Jail
 - BrksJail ERT

- IFS Emergency Button Activation
 - EBAs on the Brks IFS Talk Group will be handled by control personnel at IFS without involvement of DES.



Emergency – Dial 911

- An EBA is for an unanticipated immediate threat to life or personal safety!



- All other Emergencies – Dial 911.
 - ANI/ALI screen is received or wireless location.
 - Call-taker can easily obtain incident or patient information.
 - More information may be gathered via land line.

Questions?

