



**Communications
Level 1
Training**

Missouri Baptist Disaster Relief Communication's Level 1 Training Manual

“What use is it, my brethren, if a man says he has faith, but he has no works? Can that faith save him? If a brother or sister is without clothing and in need of daily food, and one of you says to them, "Go in peace, be warmed and be filled," and yet you do not give them what is necessary for their body, what use is that? James 2:14-16 NAS

**FIRST WE MEET THE NEED.
THEN WE PLANT THE SEED!**

Disaster Relief Communications Units are not the most visible units in Southern Baptist Disaster Relief efforts. These units are in support of the other units and those in leadership. When traveling and when set up in a command area with other units, the multitude of antenna's, wires and the satellite dish will gain attention. The Southern Baptist Disaster Relief logo and other attention getting devices are used to grab the attention of the onlooker, and put in their minds and hearts one question.... “Why do they do this”? As you and your team travel through the devastation, remember...you are representing Jesus Christ, all other Southern Baptists, the Disaster Relief Ministry, your Association, your Church, and lastly yourself.

**LET HIS LIGHT SHINE THROUGH
YOU AND YOUR TEAM.
LET HIM LEAD YOU AT ALL TIMES!**

This training is an overview. The Unit Leader (Blue Hat) will instruct the Operators and Assistants when assigned a specific role.

Introduction

It is important for us to realize why we have put together a communications unit for Missouri Baptist Disaster Relief.

Why a communications unit?

Let's look at a real life situation from a previous deployment. A mud out unit with three work orders for an area about 45 minutes away could not do one job. The next two jobs were "completed by others". Cell phones were not working in the mountains. They drove back to Command; 45 minutes away. But no one was there when they arrived at the Command Center. This unit wasted the better part of an entire day driving and waiting. And we won't even begin to speculate about an emergency situation that could have developed. In pages to come we will discuss how to overcome this difficult situation by use of a "forward deployment strategy" (page 4).

There were a couple more factors that came to bear on making the decision to build a Communications Unit:

- Southern Baptist Disaster Relief has initiated the "Incident Management System" Format.
- The Incident Management System standardizes the command structure with all Disaster Relief Partners (Red Cross, Salvation Army, FEMA, etc.).

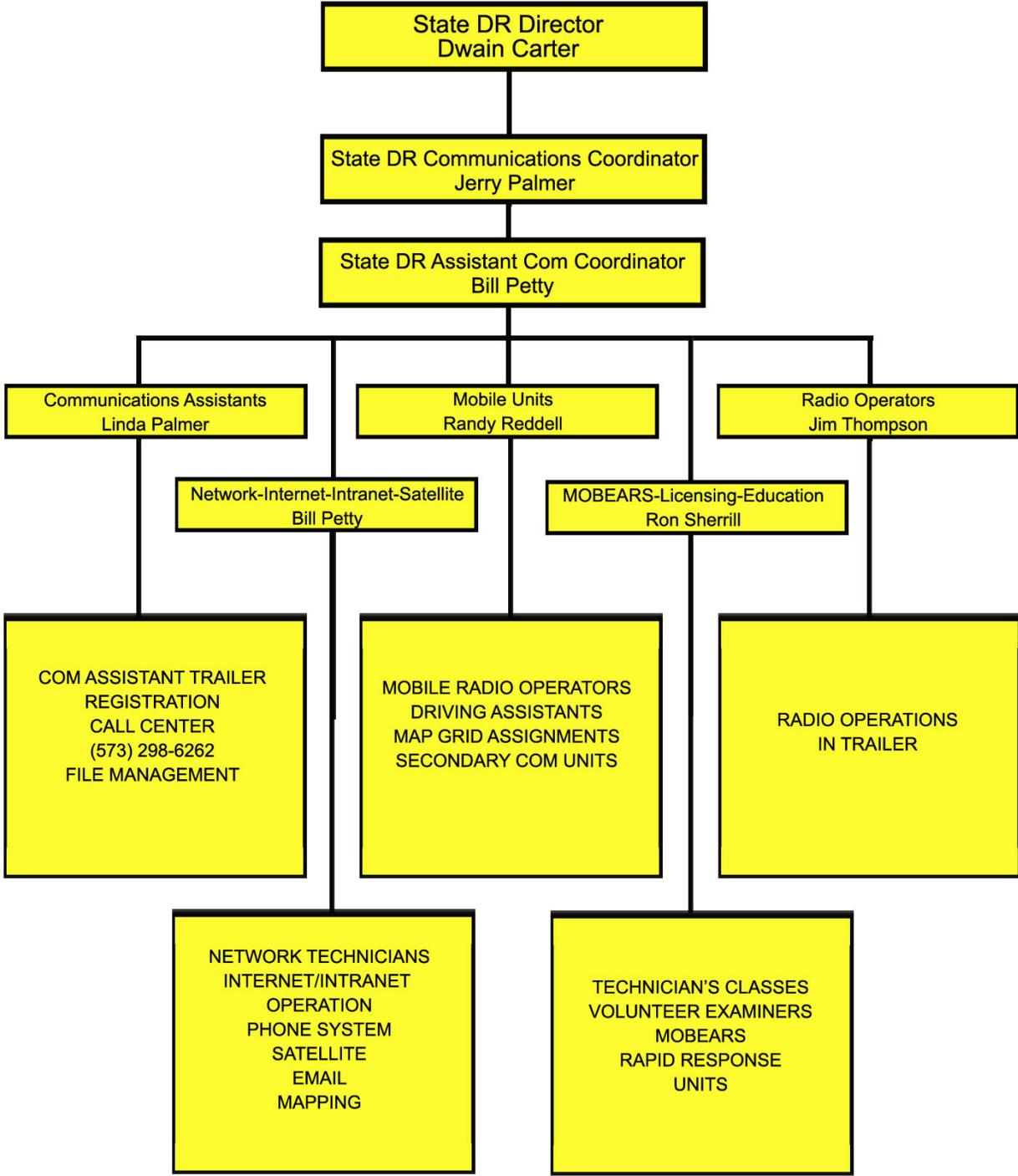
This means that communications between partners, units and Disaster Relief Leadership becomes so much more important. Many times in a disaster, standard means of communications will not function properly or will be intermittent. (Cell Phones, Hardwire Phones, Internet Access, even electricity may not work consistently.) We must be prepared and flexible enough to communicate when the normal ways are not working.

For more information on IMS and IMT, (*see Appendix A*).

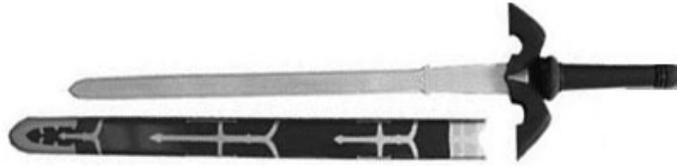
Overview of the Missouri Baptist Disaster Relief Communications Unit

The primary function of the Missouri Baptist Disaster Relief Communications Unit is to provide logistical and tactical communications support, as directed, to whatever unit or task to which they have been assigned. (This could be a clean up and recovery unit, a large feeding unit, a child care unit, a command unit or managing a local, regional or national net.)

Missouri Baptist Disaster Relief **COMMUNICATIONS**

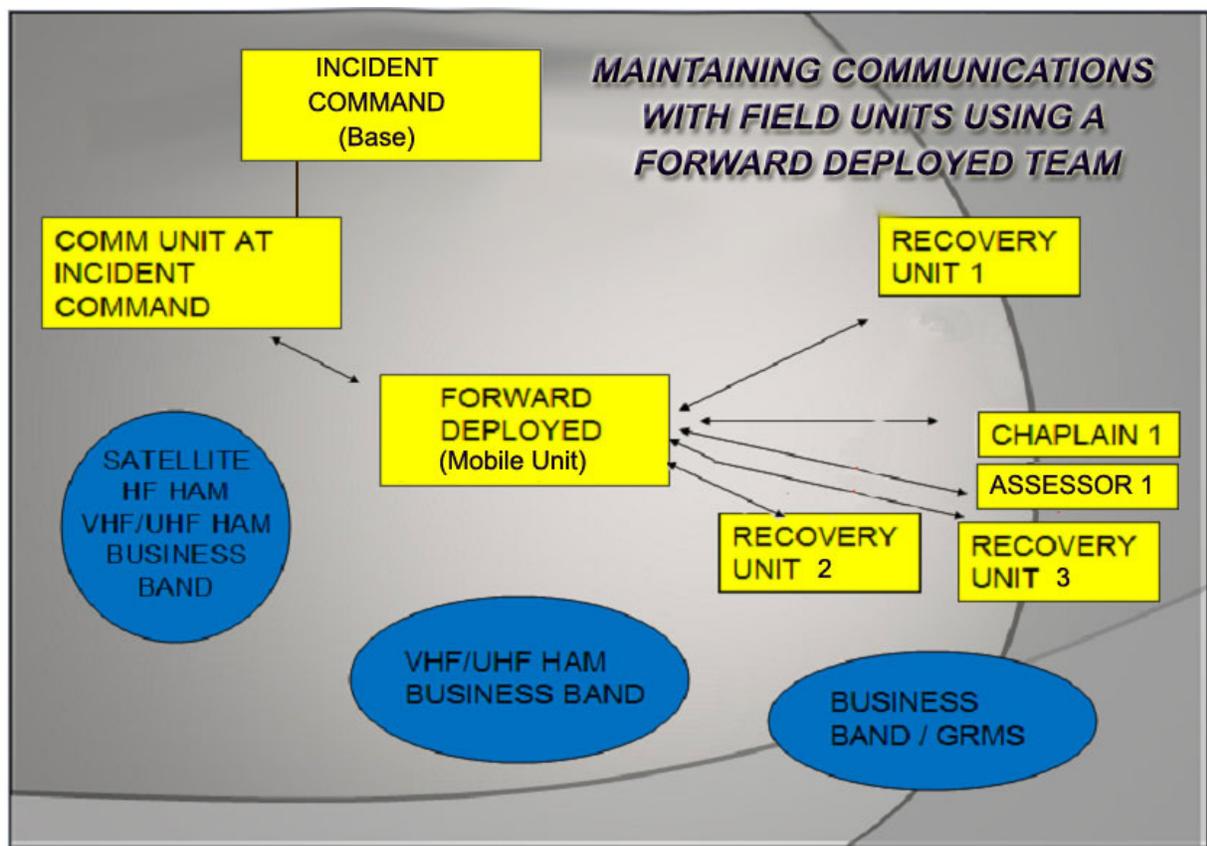


SWORD & SCABBARD



You may communicate with these varied entities in various ways. Think of our Communications needs by thinking of a sword. The Scabbard is the Disaster Operations Center (NAMB/Missouri D.R. Director). The handle is the Incident Commander. The tip is the farthest unit out on the front line, fully committed in the battle. Communications needs to flow from the scabbard all the way to the tip and back with total reliability, all the time, under any circumstance, in any location. (See Appendix B)

Maintaining Communications With Field Units Using Forward Deployed Team:



With the main unit at the IMT Command Site, a Communications Team armed with Ham & Business Band Radios would contact the recovery units that are outside the “Wireless Zone” to keep communications flowing.

Staffing a Communications Unit

A list of possible positions include:

1. State Communications Coordinator (Communications White Hat)
2. State Assistant Communications Coordinator
3. Communications Unit Leader (Blue Hat ~ *See Appendix C*)
4. Communications Radio Operators (*See Appendix D*)
5. Communications Assistant - Mobile (Radio & Driver)
6. Communications Assistant - On Com Trailer
7. Communications Assistant - Reception/Call Center
8. Technicians - Phone System and Network
9. Rapid Response Operator(s) (Jump Kit)
10. Set up & Transportation of Communications Trailer

What are the requirements to serve in Communications?

Note that we begin with the State Communications Coordinator. This is the Communications White Hat appointed by the State Director. He is the point person on all Missouri D.R. communication responses. He/she is in charge of filling positions requested by the State Director. When he/she cannot fill that role (for a short time), the State Assistant Communications Coordinator becomes acting Communications White Hat. The Communications Unit Leader (Blue Hat) has the responsibility for the operations of the trailer, the Communications Assistants, Radio Operators, and Mobile Units during deployment at a disaster event. Unit Leaders (Blue Hat) receive their training upon an invitation from the State Communications Coordinator (White Hat). (*See Appendix C for more information.*)

All Communications volunteers will need to be certified in Disaster Relief. No one is allowed to serve in Missouri Disaster Relief without a background check, going through "Introduction to Disaster Relief," and training in the specific area or areas of interest. You will also need to complete the D.R. Level 1 training in Communications. (This Training).

Our goal is for the Communications Volunteers to hold at least a Technician Amateur Radio License. However, at this time, the Communications Assistant will not need an Amateur Radio License. (Preference will be given to the Communications Assistant on the Com Trailer that holds at least a Technician's License).

The position of Technician is primarily for working with the phone system and the network. This person will be able to keep these two important systems operational. And we are looking for people to pull and set up the com trailer. These positions do not need the Technician License.

Rapid Response Operators will provide their own "Jump Kit" to go into an area that is not yet ready for vehicles. This person will be licensed.

Preference for the Communications Radio Operators will be given to those with a General Amateur License, who have completed Level 2 Com training, and completed ICS 100, 200, 700, and 800. He/They will also be able to setup, maintain and operate the Com trailer in the Field. (*See Appendix D*)

Staffing a Communications Unit, Continued

The Communications Assistant will need some basic computer knowledge and basic office skills. (Typing forms, filing, answering phone, maintaining records, etc.) All communications volunteers will assist in the setup and/or closing out of the Communications Trailer.

It is especially important in the communications area to know how to work in a team environment. The Communication Unit will help communicate with all the work of the other Disaster Relief Units. It is important to understand and be willing to follow the command structure in a disaster setting. It is just as important to be flexible and be a full part of the “Team.” (See Appendix A.)

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This training is an overview. The Unit Leader (Blue Hat) will instruct the Operators and Assistants when assigned a specific role. Next, we will acquaint you with some of the equipment used.

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The Five Equipment Types of the Communications Unit

1. Radios: Amateur, FRS/GMRS, UHF/VHF Business Band
2. Satellite Internet/Intranet
3. VOIP Phone System (3CX)
4. Mobile Office equipment
5. Tools & Spare Parts

1. RADIOS

In Amateur Radio, there are three basic licenses: Technician, General and Extra. VHF (Very High Frequency) & UHF (Ultra High Frequency) Radios go a fairly long distance (line-of-sight) but nothing compared to a HF (High Frequency) Radio (bounces off the ionosphere so you can conceivably talk around the world). In crisis situations, sometimes the only radio that will reach out is the Amateur HF Radio. The General License allows access to the HF Bands. The main reason for the Communications Unit Leader and the Radio Operator to have a General Amateur License is to be able to communicate over long distances when all other forms of communications fail.

The Communications Unit will employ several different radios. Here is a list of what we currently use:

- Amateur Radios (KDØKVS-Com Unit License ~ See Appendix E)
- Business Band (WQAL495-NAMB License ~ See Appendix E)
- General Mobile Radio Service (WQNP528 License ~ See Appendix E)

These radios will be in various forms: Base Stations, mobile radios and handy-talkies.

COMPARISON OF HAM RADIO & GMRS/BUSINESS BAND

Five Sections of the Communications Unit **1. Radios**

Ham Radio

- ⦿ Requires licensed operators
- ⦿ Requires training and/or familiarity with equipment
- ⦿ Standard UHF, VHF and HF capability
- ⦿ Repeater Capability if available

Business, GMRS Radio

- ⦿ Anyone can operate.
- ⦿ Radio is Licensed
- ⦿ Standard VHF & UHF capability
- ⦿ Simplex Operations – requires no infrastructure (GMRS can be repeated.)

Ham Radio

- ⦿ Establish VHF Net --- “KDØKVS Baptist Communications” When Amateur Radio Operators are deployed, we will inform Hams if a repeater is available and if not, what simplex frequency will be monitored.
- ⦿ Mobile Unit communicates with Com Trailer on 2 meter (i.e. 146.450).
- ⦿ Partner contact on HF Amateur (American Red Cross, SATERN, etc. *See Appendix B*)

Business, GMRS Radio

- ⦿ Recovery Unit communicate on Business Band 151.625, 151.760, 154.5275 to Mobile Unit (Chain Saw 23 or Mudout 3)
- ⦿ IMT and Logistical Units communicate on UHF (Business Band or GMRS ~ Mass Care 2, Child Care, Shower Trailer 2, etc.)
- ⦿ Chaplains & Assessors use a combination of radios (Chaplain 5, etc.)

2. Satellite Internet Access

The Communications Unit employs email through the internet and email/chat using the HF Amateur Radio. The internet system will allow access to Mapping Pages (like Google Maps, Mapquest, etc.). We have deployed a HughesNet Satellite Internet System. This system includes internet access by satellite so we do not have to be hardwired to an Internet Service Provider. The System is capable of email and carries our VOIP phone calls. The computers will allow Assistants to digitally log messages and work on the digital database. There are two separate computers built in to the Communications Trailer and two laptops available.

3. Voice Over Internet Protocol Phone System (3CX)

The Communications Unit employs a Voice Over Internet Protocol (VOIP) Phone System. The VOIP Phone System is digital and allows us to set up our own “Wireless” Phone System. The Communications Unit has a software-based IP PBX so that a “Phone Operator” is not necessary when calling from one extension to another in the PBX System. Each Disaster Relief Unit within the area covered by our “Access Point” will have an extension on the PBX Phone system and will be able to access email. We are using software from the 3CX Corporation. For more information on the 3CX Phone System (*See Appendix H*):

4. Mobile Office Equipment

The Communications Unit is capable of full integration of Internet, VOIP Phones, Email, Printing, etc. with the Incident Management Team. The Communications Unit employs an All-In-One Fax/Printer/Scanner.

5. Tools & Spare Parts

An inventory of tools and spare parts will be available on the Communications Trailer.

The Trailer Deployment

Setting up the Communications Unit

Using the inventory list, those who are setting up the communications trailer for operation should ensure where all the equipment is located and that it is in proper working order. Physically locating the trailer, the persons doing setup should focus on good alignment to the southwest for the satellite system and a good location for the best radio transmissions. The next step would be to set the generator at a safe distance from the trailer, put the jacks on blocks and level the trailer, assemble the mast, antennas, access points and client bridge if needed. The next step involves connecting the shoreline/generator, antennas and network “cat 5” cables. Setup the satellite system. Setup the mobile office, if needed. Set fuel cans in a safe place. Setup the water and sewer system if they are connected.

Operating the Communications Unit

Operations: (working as a team)

1. Run diagnostics on all systems. Log onto satellite system and check for adequate upload/download speeds. Check all phones for integration with the PBX, ability to use outgoing gateways (calls outside unit on SKYPE), and email/internet operations. Also, run a check on the UPS and Battery Inverters to insure proper operation.
2. Meet with the Incident Commander to assess communications needs.
3. Establish Operations Schedule, establish nets on UHF, VHF and HF, open forms on computer or pull hard copies to begin logging and messaging.
4. Operate until unit is no longer needed.

Closing out the Communications Unit

Using the inventory list, ensure all equipment is packed and secure for transportation. Physically shut down trailer’s generator, jacks, mast/antennas/Access Points/Client Bridge if used. Store satellite system. Disconnect shoreline/generator, antennas, network “cat 5” cables. Tear down the Mobile Office if it was used. Store fuel cans in safe place for return trip. Disconnect water/sewer system if used.

ADDITIONAL INFORMATION

We are currently scheduling three to four locations around the state to hold one day class for the Amateur Technicians License. If we have five or six people in a region that is willing to host this Saturday Class, the students will end that day by taking the FCC exam.

www.fema.gov for ICS 100, 200, 700, 800

www.arrl.org

www.hamtestonline.com (can use without an account)

<https://hamstudy.org> (must register/sign in)

www.qrz.com (must register/sign in)

Missouri Baptist Communication's CONTACTS

Missouri Baptist Communication's Unit: Website: www.mobaptistdr.org

Dwain Carter, MO Baptist DR State Specialist

1-800-736-6227 ext. 314, dcarter@mobaptist.org

Jerry Palmer, MO Baptist Communications Coordinator/Trainer

WØ GRP, 816-805-2523 cell, jpalmer@mobaptistdr.org

Bill Petty, MO Baptist Assistant Communications Coordinator/Trainer

KDØNGB, (314) 799-5780 bpetty@mobaptistdr.org

Linda Palmer, MO Baptist Communications Trainer

KDØ MAF, 816-296-3021 office, lpalmer7@mobaptistdr.org

Phone Number for possible use in deployments: (573) 298-6262

ALWAYS REMEMBER:

Use plain language (radio)

Repeat all information (phone & radio)

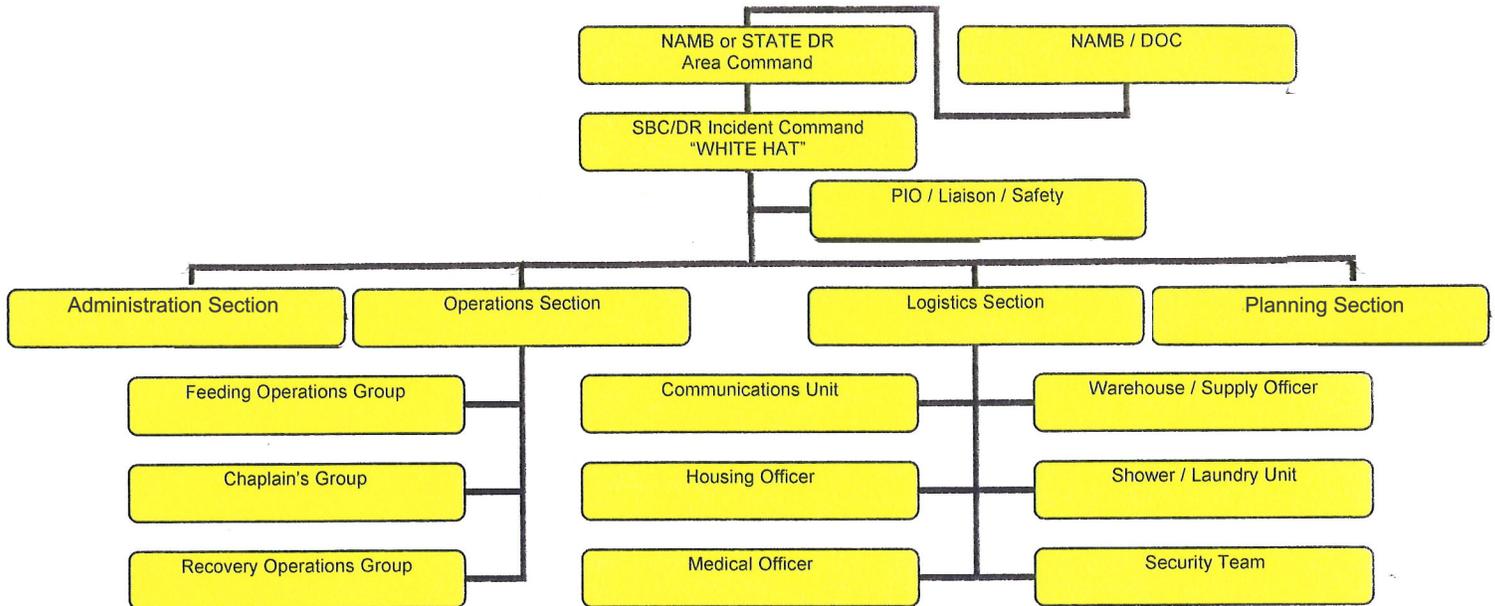
Leave "Roger" at home.

Never use special codes (10 codes or Q codes)

Learn IPC (*See Appendix G*)

APPENDIX A

Incident Management System & Command Structure



Maintaining Incident Management Team Structure Roles/Positions:

In using the Incident Management System, administration during the local event is achieved with these officers.

1) The Incident Commander: this person is assigned by the Missouri Baptist State Disaster Relief Director. The IC is in charge of all the units during a response.

a. **The Safety Officer:** anticipates, identifies and assesses unsafe conditions. Oversees all health & safety aspects of DR volunteers. Reports directly to the Incident Commander.

b. **The PIO (Public Information Officer):** informs the public, media and agencies of the progress being made during the response. Reports directly to the Incident Commander. Approves media interviews with volunteers.

2) The Operations Officer: is responsible for the recovery units (out in the field). This may be a separate person or may be the Incident Commander.

3) The Logistics Officer: is responsible for all units in route to and at the assigned location (including housing, food, general supplies and trailer/vehicle parking). This may be a separate person or may be the Incident Commander.

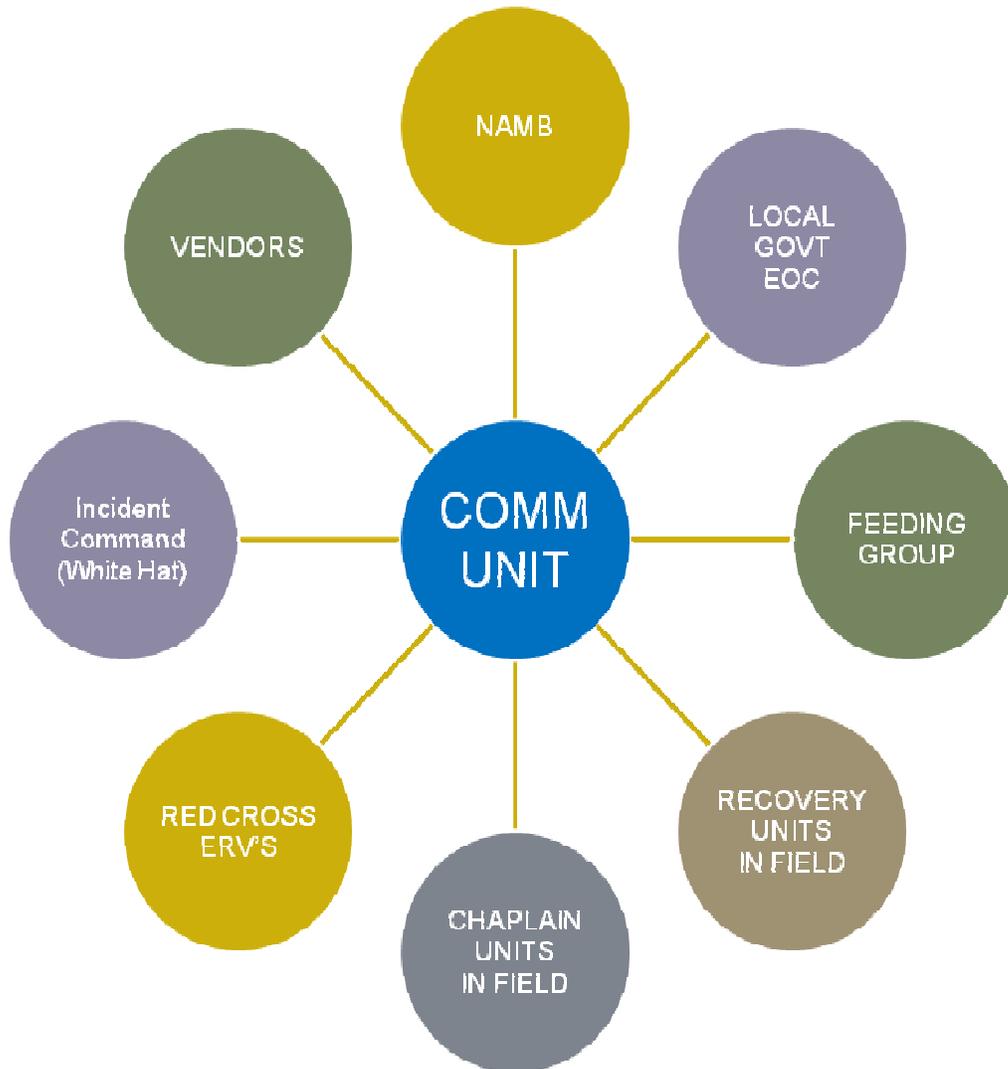
4) The Administrations Officer: is responsible for all reports, paper work, etc. This person reports back to Jefferson City & the SBC. May be the Incident Commander.

4) The Planning Officer: is responsible for preparations for deployment. This person more than likely will be in Jefferson City and/or at NAMB DOC. May be the Incident Commander.

APPENDIX B

MAINTAIN COMMUNICATIONS WITH ALL PARTNER ENTITIES

The Communications Unit must maintain communication with more than just other DR Units. Some of the entities that we must continually converse with include:



- The North American Missions Board
- Local Government Emergency Office Coordinators
- Vendors
- Incident Commanders (On-Site Coordinator)
- Feeding Units
- Recovery Units in the Field
- Red Cross ERV's
- Chaplain's Units in the Field.

APPENDIX C

Unit Leader (Blue Hat) Requirements for the Communications Unit

What are the requirements to serve as the Unit Leader (Blue Hat) on the Communications Unit? First, the Communications Unit Leader will need to be certified in Disaster Relief. No one is allowed to volunteer for Disaster Relief without a background check, going through “Introduction to Disaster Relief,” and training in the specific area or areas where they are interested in serving. The Unit Leader (Blue Hat) will need to complete the D.R. Level 1 training for “Communications” and complete the training for “Unit Leader/Blue Hat”. The Unit Leader/Blue Hat position will be by invitation only.

Second, the Communications Unit Leader (Blue Hat) will need at least a General Amateur Radio License. (Copies of all licenses are filed in the Communications Unit.)

Third, the Communications Unit Leader (Blue Hat) must complete FEMA’s online classes in Incident Command (ICS 100, 200, 700 & 800). (Copies of certificates of completion are forwarded to the MO Communications Coordinator.)

Fourth, the Communications Unit Leader (Blue Hat) will need some basic computer knowledge and radio skills.

Fifth, the Communications Unit Leader (Blue Hat) will participate in Disaster Relief Level 2 Trainings.

Sixth, the Communications Unit Leader (Blue Hat) will need to know how to setup, maintain and operate the Communications Trailer in the Field.

Finally, the Communications Unit Leader (Blue Hat) will need to know how to lead a team in a team environment.

It might be good at this point to give the guidelines for leadership. All Missouri Disaster Relief Units are called out only by the Missouri Baptist Disaster Relief Director. The State Director assigns an Incident Commander, locations and number of units for a particular area. The Incident Commander will be in charge of all of the units in his area. While the Incident Commander is in charge, the responsibility for the operations of the trailer and the communications area is the Communications Unit Leader's (Blue Hat's) working under the direction of the State Communications Coordinator (White Hat).

The Communications Unit Leader's (Blue Hat's) Responsibilities

What are the responsibilities of the Unit Leader (Blue Hat) on the Communications Unit? Those responsibilities would include:

- To provide overall coordination of communications between the Incident Management Team and responding or active DR Units.
- To provide leadership and direction to all Communications Personnel
- Verify that the communication network is established and maintained during deployment.

APPENDIX D

Requirements For The Communications Radio Operator

What are the requirements to serve as a Communications Radio Operator?

First, the Communications Radio Operator will need to be certified in Disaster Relief. No one is allowed to volunteer for Disaster Relief without a background check, going through "Introduction to Disaster Relief," and training in the specific area or areas where they are interested in serving. The Communications Radio Operator will need to complete the D.R. Level 1 training for "Communications." (This training.)

Second, preference will be given to the Communications Radio Operator who holds at least a General Amateur License. However, a Technician's Amateur Radio License is required.

Third, preference will be given to the Communications Radio Operator who has completed FEMA's online classes in Incident Command (ICS 100, 200, 700 & 800). (Copies of certificates of completion are forwarded to the MO Communications Coordinator.)

Fourth, preference will be given to the Communications Radio Operator who participates in Disaster Relief Level 2 Trainings.

Fifth, the Communications Radio Operator will know how to setup, maintain and operate the Communications Trailer in the Field.

Sixth, the Communications Radio Operator will need some basic computer knowledge and good radio skills.

Seventh, the Communications Radio Operator will need to know how to work in a team environment.

APPENDIX E

RADIO LICENSES

The Communications Unit will employ several different radios. Below is some of the licenses we carry to ensure we are legally transmitting:

MOBEARS: (Missouri Baptist Emergency Amateur Radio Service) KDØKVS

North America Mission Board Disaster Relief Business Band


UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AMATEUR RADIO LICENSE
KDØKVS


ATTN: JAMES P RYAN
 MISSOURI SOUTHBEARS
 PO BOX 478
 LAWSON, MO 64062-0478

FCC Registration Number (FRN): 0019679638

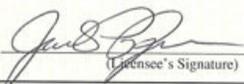
Special Conditions / Endorsements

NONE

Grant Date	Effective Date	Print Date	Expiration Date
03-22-2010	03-22-2010	03-23-2010	03-22-2020

File Number	Operator Privileges	Station Privileges
0004181344		CLUB

THIS LICENSE IS NOT TRANSFERABLE


 (Licensee's Signature)

FCC 660 - May 2007

Cut Along This Line

GMRS
(General Mobile Radio Service-UHF)


Federal Communications Commission
Wireless Telecommunications Bureau
RADIO STATION AUTHORIZATION

LICENSEE: NORTH AMERICAN MISSION BOARD SBC

Call Sign	File Number
WQAL495	0006250270

ATTN: CATHY MILLER
 NORTH AMERICAN MISSION BOARD SBC
 4200 N POINT PARKWAY
 ALPHARETTA, GA 30022-4176

Radio Service	Regulatory Status	Frequency Coordination Number
IG - Industrial/Business Pool, Conventional	PMRS	

FCC Registration Number (FRN): 0010464089

Grant Date	Effective Date	Expiration Date	Print Date
05-06-2014	05-06-2014	06-28-2024	05-07-2014

STATION TECHNICAL SPECIFICATIONS

Fixed Location Address or Mobile Area of Operation

Loc. 1
 Area of Operation
 Operating Nationwide including Hawaii, Alaska, and US Territories
 Location 1 Special Condition
 Area of operation is restricted to south of Line A and/or west of Line C.

Antenna No.	Ant. Freq. (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp (meters)	Ant. AAT (meters)	Construct Deadline Date
1	000151.6250000	MOI	100		11K2F3E	40.000	40.000			
1	000151.7600000	MOI	10		11K2F3E	35.000	35.000			
1	000154.5275000	MOI	100		11K2F3E	35.000	35.000			
1	000464.5000000	MOI	100		11K2F3E	35.000	35.000			
1	000464.5500000	MOI	100		11K2F3E	35.000	35.000			

Control Points
 Control Pt. No. 1
 Address: 4200 N POINT PARKWAY
 City: ALPHARETTA County: FULTON State: GA Telephone Number: (770)410-6443

Waivers/Conditions:
 License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 1-10).

Conditions:
 Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

State Coordinator Personal License
(Jerry Palmer, WØGRP)


Federal Communications Commission
Wireless Telecommunications Bureau
RADIO STATION AUTHORIZATION

LICENSEE: PALMER, GERALD R

PALMER, GERALD R
 108 W. 3RD ST.
 PO BOX 478
 LAWSON, MO 64062

FCC Registration Number (FRN): 0019070937

Call Sign	File Number	Radio Service
WQNP528	0004684812	ZA - General Mobile Radio (GMRS)

Grant Date	Effective Date	Print Date	Expiration Date
04-09-2011	04-09-2011	04-09-2011	04-09-2016

Waivers/Conditions:
 Effective 2/16/99 the GMRS rules have been amended and you may operate on any of the primary or interstitial channels shown in section 95.29. Exception: Licensees who operate North of Line A and East of Line C may not operate on channels 462.650 MHz, 467.650 MHz, 462.700 MHz, and 467.700 MHz unless your previous license authorized such operations.

Conditions:
 Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

FCC 668-G August 2007


UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AMATEUR RADIO LICENSE
WØGRP


PALMER, GERALD R
 153 CARDINAL CIRCLE
 LAWSON, MO 64062-9314

FCC Registration Number (FRN): 0019070937

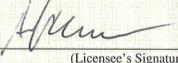
Special Conditions / Endorsements

NONE

Grant Date	Effective Date	Print Date	Expiration Date
04-26-2011	04-26-2011	05-02-2013	04-26-2021

File Number	Operator Privileges	Station Privileges
0005761835	General	PRIMARY

THIS LICENSE IS NOT TRANSFERABLE


 (Licensee's Signature)

FCC 660 - May 2007

APPENDIX F

TYPICAL CONVERSATION

Com Trailer on 2 meter Amateur Radio: “WØGRP Mobile 2 this is KDØKVS Baptist Com.”

Mobile 2: “KDØKVS Baptist Com, this is WØGRP Mobile 2, go ahead.”

Com Trailer: “Operations needs to know the current location of Chain Saw 23.”

Mobile 2: “Operations needs to know the current location of Chain Saw 23, Stand by Baptist Com and we will check. WØGRP Mobile 2 clear.”

Com Trailer: “That is correct, KDØKVS Baptist Com standing by.”

Mobile 2 on Business Band: “Chain Saw 23 this is Mobile 2”.

Chain Saw 23: “Chain Saw 23, go ahead”.

Mobile 2: “Operations needs a current address of your unit”.

Chain Saw 23: “Operations needs a current address of our unit. We are currently at 2300 Spruce Street”.

Mobile 2: “I understand. Chain Saw 23 is located at 2300 Spruce Street. Thank you Chain Saw 23, Mobile 2 out.”

Chain Saw 23: “Chain Saw 23 out.”

Mobile 2 on 2 meter Amateur Radio: “KDØKVS Baptist Com, this is WØGRP Mobile 2”.

Com Trailer: “WØGRP Mobile 2, this is KDØKVS Baptist Com, go ahead”.

Mobile 2: “Baptist Com, Chain Saw 23 is currently located at 2300 Spruce Street”.

Com Trailer: “Chain Saw 23 is currently located at 2300 Spruce Street. Thank you Mobile 2. KDØKVS Baptist Com out”

Mobile 2: “WØGRP Mobile 2 out”.

STEPS FOR RADIO ETIQUETTE ON PREPARATION TO LEAVE BASE

1. Contact Com Trailer/Mobile Unit and inform them you are ready to deploy.
2. Contact Com Trailer/Mobile Unit and inform them you are on location.
3. Contact Com Trailer/Mobile Unit and inform them when you are changing locations.
4. Contact Com Trailer/Mobile Unit and inform them you are about to return to base.
5. Contact Com Trailer/Mobile Unit and inform them you have arrived back at base.

APPENDIX G

International Phonetic Code

Each amateur radio station has been assigned by the appropriate licensing agency of his or her government a unique call sign. To avoid confusion and enhance effective communications, during network operations, all station call signs should be communicated phonetically. Only the International Phonetic Alphabet should be used:

ALPHA	NOVEMBER
BRAVO	OSCAR
CHARLIE	PAPA
DELTA	QUEBEC
ECHO	ROMEO
FOXTROT	SIERRA
GOLF	TANGO
HOTEL	UNIFORM
INDIA	VICTOR
JULIET	WHISKEY
KILO	X-RAY
LIMA	YANKEE
MIKE	ZULU

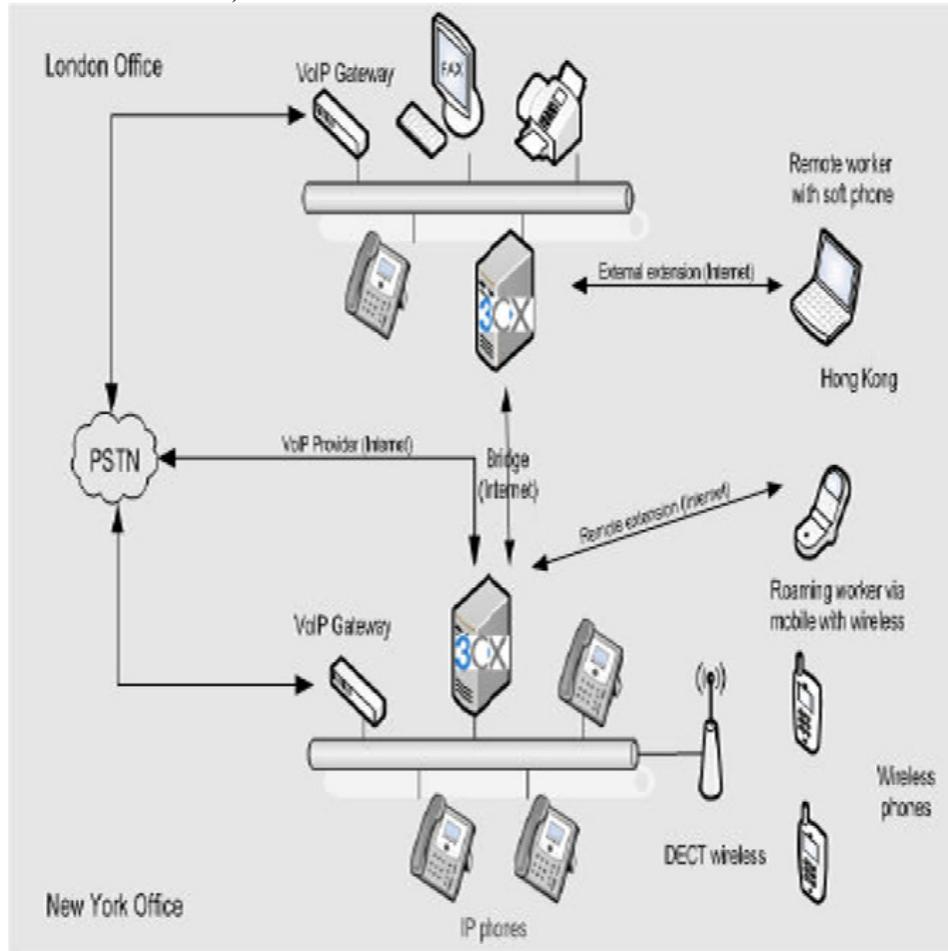
The International Phonetic Alphabet is used around the world and, in some cases, represents the only knowledge of the English language that some foreign operators possess.

Remember: To maximize communications efficiency, your station's call sign should always be communicated phonetically. For example, THIS IS WHISKY FIVE BRAVO VICTOR BRAVO will, most likely, be copied correctly on the first try. Try saying that call sign without phonetics ... you'll understand why the proper use of phonetics is not only desirable, but, in some cases, mandatory.

APPENDIX H

The 3CX VOIP Phone System

3CX Phone System for Windows is a software-based IP PBX that replaces a proprietary hardware PBX / PABX. 3CX's IP PBX has been developed specifically for Microsoft Windows and is based on the SIP standard – making it easier to manage and allowing you to use any SIP phone (software or hardware). A software-based IP PBX / PABX offers numerous benefits:



- Easier to install & manage via web-based configuration interface
- Far less expensive than a conventional hardware based PBX/PBAX
- Improve productivity with presence, desktop based call control and extension management
- No need for separate phone wiring – phones use computer network, easy hot desking!
- Delivery mobility by allowing employees to work from home using a remote extension
- Choose between popular IP hardware phones or softphones - no vendor lock in
- Receive & Make calls via the standard PSTN using VOIP Gateways or cards

VOIP PHONE SYSTEM (Voice Over Internet Protocol)

- ⊙ Computer Controlled
- ⊙ Works like a Telephone
- ⊙ Transfer calls from extension to extension or place calls directly from extension to extension. **Calls from outside:** “Baptist Disaster Relief, may I help you?”
Calls from extensions: “Communications, may I help you?”