Multnomah County Tactical Communications Plan

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Multnomah County Tactical Communications Plan

Introduction

Purpose

This Annex describes Multnomah County's communications infrastructure and establishes a concept of operations for how this system should be used in day to day activities, post disaster, or in any emergency when telephone, fax, computer networks and internet are unavailable or supplemental field communications are needed.

Scope

This Annex

- Supports Multnomah County's Emergency Operations Plan and can be utilized by county staff, departments and elected officials as a guide to facilitate communications both internally and with external response partners.

- Establishes common communications channels and procedures for use, as well as how communication channels could be prioritized in an emergency.

- Is coordinated with and follows the Regional Tactical Interoperable Plan (TICP) and the Regional Field Operations Guide (RFOG).

Situation and Assumptions

Situation

This plan is intended to be used as part of day-to-day activities as well as for disasters or large scale incidents requiring the use of either backup communications or supplemental communications in the field. This plan requires no activation as it should be in daily use.

Assumptions

- Certain types of disasters or incidents will involve the use of radios
- Cell phones and internet may be unavailable for hours, days, or weeks following a large scale disaster
- The volume of messages will scale proportionally to the scope, scale, and severity of the incident
- Multnomah County's VHF infrastructure and the Portland Regional 800MHz system are functional
- Users of this plan and supporting SOG's have a functional understanding of the English language and can listen, comprehend, and speak over the radio

Concept of Operations

Direction, Control and Coordination

This plan is intended to be in use for day-to-day activities, supplemental communications, and large scale incidents under the direction and planning of Multnomah County Emergency Management. If an incident arises where normal communications are disrupted, all affected departments are encouraged to move this plan to the appropriate phase, as described below, and inform Multnomah County Emergency Management of the move. Control of this plan shall remain under Multnomah County Emergency Management. Coordination of this plan with other departments, internal customers, external customers, and the regional Tactical Interoperable Communications Plan (TICP) shall remain with Multnomah County Emergency Management. Every attempt should be made to ensure that all channels, frequencies and listings are correct and coordinated with the TICP and the Regional Field Operations Guide (RFOG).

Operating Phases (5 Phases)

Any department may move to any phase of this plan to address the situational need. Escalating events may preclude the smooth transition from one phase to the next. (i. e. moving from **Phase one** directly to **Phase four**). If supplemental communications are needed in the field (i.e. POD's, field shelters) notify Multnomah County Emergency Management so that proper support, coordination and monitoring may be put into place.

1. **Phase One** of this plan is normal day to day activity. All landline phone lines, cell phones, fax lines, 800MHz radio system, VHF radio repeaters, network and internet connections are functional and are in normal use.
2. **Phase Two** of this plan assumes that some portion, or all, of the landline phone system, as well as fax lines are unavailable. During **Phase Two** it is understood that radio could become a primary method of voice communication between County Departments, County Emergency Management and emergency management offices in the surrounding community. If network and internet connections are still available, then the use of Email for data communication should be used. If the 800MHz system is available, normal dispatch and response conditions for that system should be used. If cell phones are still useable, be sure chargers are available. Radio operations will be governed by the tactical radio standard operating guidelines in Appendix 1.
3. **Phase Three** of this plan assumes that all landline phones, fax lines, network and internet connections have been lost. Cell phone voice connectivity may be lost. During **Phase Three** it is understood that radio is the primary method of voice communications and a secondary method of reduced data communication between County Departments, County Emergency Management and emergency management offices in the surrounding community. If the 800MHz system is available, normal dispatch and response conditions for that system should be used. Radio operations will be governed by the tactical radio standard operating guidelines in Appendix 1.

4. **Phase Four** of this plan assumes that all landline phones, fax lines, cell phones, network and internet connections have been lost and the city owned 800MHz system is either offline or overloaded. During **Phase Four** it is understood that VHF radio communications will be the primary method of voice communication between County Departments, County Emergency Management and emergency management offices in the surrounding community. Radio operations will be governed by the tactical radio standard operating guidelines in Appendix 1.
5. **Phase Five** of this plan assumes that all landline phones, fax lines, cell phones, network and internet connections have been lost and all radio repeater functions, either county owned or city owned, including the 800MHz system, are either lost or overloaded. During **Phase Five** it is understood that VHF simplex radio communications will be the primary method of voice communication between County Departments, County Emergency Management and emergency management offices in the surrounding community. Radio operations will be governed by the tactical radio standard operating guidelines in Appendix 1

Table of Connectivity						
	Landlines	**Fax Lines**	**Cell Phones**	**Internet**	**800MHz**	**VHF systems**
Phase 1	Yes	Yes	Yes	Yes	Yes	Yes
Phase 2	No/ partial	No/ partial	Yes/ part	Yes	Yes	Yes
Phase 3	No	No	No/ Partial	No	Yes	Yes
Phase 4	No	No	No	No	No	Yes/ repeaters
Phase 5	No	No	No	No	No	Yes/ Simplex

Organization and Assignment of Responsibilities

The Multnomah County Electronic Services section maintains responsibility for the radio system, including purchasing of radios, repeater installations, tower maintenance, antenna maintenance and all other radio maintenance. Multnomah County Emergency Management is responsible for maintaining this plan. Individual departments are responsible for basic radio training for affected personnel and, in coordination with County Electronic Services Section, are responsible for radio equipment purchases.

Plan Development and Maintenance

This Annex, along with supporting standard operating guidelines and appendices, has been developed with input from Multnomah County Departments, external response partners, regional planners and coordinated with the TICP and RFOG.

This Annex, along with supporting standard operating guidelines and appendices, will be reviewed annually.

Authorities and References

- City of Portland Base Emergency Operations Plan and Communications Annex
- Community Preparedness Guidelines (CPG101)
- Corbett Citizen Patrol Guide
- Multnomah County Health Department Communication Plan
- National Emergency Communications Plan
- Oregon Health Preparedness Region 1 Regional Communication Guide
- Oregon Statewide Communications Interoperability Plan
- Regional Ham ComKit Notebook and CD
- Regional Interoperable Communications Plan[1]
- UASI Tactical Interoperable Communication Plan (TICP)

Appendices

- Appendix 1 - Tactical Radio Standard Operating Guidelines
- Appendix 2 - Radio System Summary
- Appendix 3 - Multnomah County Radio Templates (VHF/800)
- Appendix 4 - Tactical Radio Plan Job Aid
- Appendix 5 - Definitions

[1] At the end of 2012, the Regional Interoperable Communications Plan was still under development. BOEC is the lead agency.

Appendix 1: Tactical Radio Standard Operating Guidelines

Multnomah County Standard Operating Guideline for Internal Radio Communications (Phase One)

During **Phase One** it is understood that all landline phone lines, cell phones, fax lines, 800MHz radio system, VHF radio repeaters, computer network and internet connections are functional and are in normal use. Normal day to day activities may take place.

If supplemental communications are needed in the field, notify Multnomah County Emergency Management so that proper support and coordination may be put in place.

Multnomah County Standard Operating Guideline for Internal Radio Communications (Phase Two)

Once the Multnomah County Tactical Radio Communications Plan **Phase Two** has been implemented, the following should take place:

1. Multnomah County Emergency Management will begin monitoring the Multnomah County Emergency Management channel (MCEM Repeater) on the VHF radios

2. Multnomah County Emergency Management will announce over this channel the following:
    a. The Tactical Radio Communication Plan has been moved to **Phase Two**
    b. This channel will be monitored by emergency management staff for the duration of the incident
    c. Emergency Management will issue radio call-downs at least once an operational period
    d. (Any additional information related to operational planning, response, or countywide COOP deemed necessary)

3. Department heads and County leadership assigned VHF radios may tune their radios to the Multnomah County EM channel and engage in communications

4. Emergency Management staff will conduct radio call-downs at least once an operational period

5. Individual departments should establish radio communications within their departments by following their communications plan

If necessary, emergency management has the responsibility to establish communications guidelines (i.e. net control) to ensure essential communications are heard. For example,

in a large incident, it may be necessary to limit communications to command level, while in a smaller incident this may not be necessary.

As with all other emergency radio systems, plain language (common terminology) shall be used. The speaker should call for the individual or department they wish to contact prior to identifying themselves (i.e. Emergency Management Director from County Chair's Office).

Multnomah County Standard Operating Guideline for <u>External</u> Radio Communications (Phase Two)

Once the Multnomah County Tactical Radio Communications Plan has been moved to **Phase Two**, the following should take place:

1. Multnomah County Emergency Management will begin monitoring the EOC METRO talkgroup on the 800mHz system

2. Multnomah County Emergency Management will announce over this channel the following:
    a. The Tactical Radio Communication Plan has been moved to **Phase Two**
    b. This channel will be monitored by Multnomah County emergency management staff for the duration of the incident

3. MCEM staff should make contact with PBEM and Gresham EM at least once per operational period for the duration of the incident. If it has been decided that MCEM will maintain direct communications with the Cities of Troutdale, Fairview, and Wood Village, contact should be made at least once per operational period as well.

If necessary, emergency management has the responsibility to establish communications guidelines (i.e. net control) to ensure essential communications are heard. For example, in a large incident, it may be necessary to limit communications to command level while in a smaller incident this may not be necessary.

As with all other emergency radio systems, plain language (common terminology) shall be used. The speaker should call for the individual or station they wish to contact prior to identifying themselves (i.e. City of Portland Operations Chief from Multnomah County Emergency Management).

Multnomah County Standard Operating Guideline for Internal Radio Communications (Phase Three)

Once the Multnomah County Tactical Radio Communications Plan **Phase Three** has been implemented, the following should take place:

6. Multnomah County Emergency Management will begin monitoring the Multnomah County Emergency Management channel (MCEM Repeater) on the VHF radios

7. Multnomah County Emergency Management will announce over this channel the following:
    e. The Tactical Radio Communication Plan has been moved to **Phase Three**
    f. This channel will be monitored by emergency management staff for the duration of the incident
    g. Emergency Management will issue radio call-downs at least once an operational period
    h. (Any additional information related to operational planning, response, or countywide COOP deemed necessary)

8. Department heads and County leadership assigned VHF radios may tune their radios to the Multnomah County EM channel and engage in communications

9. Individual departments should establish radio communications within their departments by following their communications plans

10. Emergency Management staff will conduct radio call-downs at least once an operational period

If necessary, emergency management has the responsibility to establish communications guidelines (i.e. net control) to ensure essential communications are heard. For example, in a large incident, it may be necessary to limit communications to command level, while in a smaller incident this may not be necessary.

As with all other emergency radio systems, plain language (common terminology) shall be used. The speaker should call for the individual or department they wish to contact prior to identifying themselves (i.e. Emergency Management Director from County Chair's Office).

Multnomah County Standard Operating Guideline for External Radio Communications (Phase Three)

Once the Multnomah County Tactical Radio Communications Plan has been moved to **Phase Three**, the following should take place:

4. Multnomah County Emergency Management will begin monitoring the EOC METRO talkgroup on the 800mHz system

5. Multnomah County Emergency Management will announce over this channel the following:
    a. The Tactical Radio Communication Plan has been moved to **Phase Three**
    b. This channel will be monitored by Multnomah County emergency management staff for the duration of the incident

6. MCEM staff should make contact with PBEM and Gresham EM at least once per operational period for the duration of the incident. If it has been decided that MCEM will maintain direct communications with the Cities of Troutdale, Fairview, and Wood Village, contact should be made at least once per operational period as well.

If necessary, emergency management has the responsibility to establish communications guidelines (i.e. net control) to ensure essential communications are heard. For example, in a large incident, it may be necessary to limit communications to command level while in a smaller incident this may not be necessary.

As with all other emergency radio systems, plain language (common terminology) shall be used. The speaker should call for the individual or station they wish to contact prior to identifying themselves (i.e. City of Portland Operations Chief from Multnomah County Emergency Management).

Multnomah County Standard Operating Guideline for the 800MHz System down or overloaded (Phase Four)

In the event the 800MHz system is overloaded or is unavailable, the Multnomah County VHF system shall be used as an internal and external communications system. Follow the Multnomah County internal communications guide with the addition of an interoperable external use channel for all ECCs and EOCs to use.

11. Multnomah County Emergency Management will begin monitoring the Multnomah County Emergency Management interoperability channel on the VHF radios (155.7900MHz Sx) (old corrections, now flagging frequency)

12. Multnomah County Emergency Management will announce over this channel the following:

i. The Tactical Radio Communication Plan has been moved to **Phase Four**
j. This channel will be monitored by emergency management staff for the duration of the incident

13. MCEM staff should make contact with PBEM and Gresham EM at least once per operational period for the duration of the incident. If it has been decided that MCEM will maintain direct communications with Troutdale, Fairview, and Wood Village, contact should be made at least once per operational period as well.

14. Multnomah County Sheriff's Office should move dispatch and Deputy contact communications to the MC Roads repeater channel. Multnomah County Roads should move to the Animal Services repeater and share operations on that channel.

15. Internal communications to MCEM should remain on the MCEM repeater. Individual departments should establish radio communications within their departments by following their communications plans

If necessary, emergency management has the responsibility to establish communications guidelines (i.e. net control) to ensure essential communications are heard. For example, in a large incident, it may be necessary to limit communications to command level while in a smaller incident this may not be necessary.

As with all other emergency radio systems, plain language (common terminology) shall be used. The speaker should call for the individual or station they wish to contact prior to identifying themselves (i.e. City of Portland Operations Chief from Multnomah County Emergency Management).

Multnomah County Standard Operating Guideline for all repeater systems down or overloaded (Phase Five)

In the event the 800MHz system is overloaded or is unavailable and the Multnomah County VHF repeater system is offline, then simplex radio communication shall be used for external and internal communications.

16. Multnomah County Emergency Management will begin monitoring the Multnomah County Emergency Management interoperability channel on the VHF radios (155.7900MHz Sx) (old corrections, now flagging frequency)

17. Multnomah County Emergency Management will announce over this channel the following:

k. The Tactical Radio Communication Plan has been moved to **Phase Five**

l. This channel will be monitored by emergency management staff for the duration of the incident

18. MCEM staff should make contact with PBEM and Gresham EM at least once per operational period for the duration of the incident. If it has been decided that MCEM will maintain direct communications with Troutdale, Fairview, and Wood Village, contact should be made at least once per operational period as well.

19. Multnomah County Sheriff's Office should move dispatch and Deputy contact communications to the MC Roads repeater output frequency (talk-around). Multnomah County Roads should move to the Animal Services repeater output frequency and share operations on that channel (talk-around).

20. Internal communications to MCEM should be moved to the MCEM repeater output frequency (talk-around). Individual departments should establish radio communications within their departments by following their communications plan.

If necessary, emergency management has the responsibility to establish communications guidelines (i.e. net control) to ensure essential communications are heard. For example, in a large incident, it may be necessary to limit communications to command level while in a smaller incident this may not be necessary.

As with all other emergency radio systems, plain language (common terminology) shall be used. The speaker should call for the individual or station they wish to contact prior to identifying themselves (i.e. City of Portland Operations Chief from Multnomah County Emergency Management).

Appendix 2: Multnomah County Radio System Summary

Overview

Multnomah County utilizes handheld, mobile and fixed radio stations on several different systems.

Multnomah County VHF System

This system is owned and operated by the county. The county has four sites located at Council Crest, Willalatin Tank, Rocky Butte, and the Yeon Building (See Figure 1 below).

Figure 1 *Multnomah County VHF Radio Towers*

The main site for the VHF system is located at Rocky Butte in the outer northeast section of the city. This tower site transmits and receives signals for the Roads Department, Animal Services, and emergency management. Additional receivers for Roads and Animal Services are located on the west side at Council Crest and Willalatin Tank, and in Washington State at Biddle Butte, across the river from Rooster Rock State Park. Table 001, below, provides additional descriptions for each of the towers.

Table 001 *Multnomah County VHF tower descriptions*

Tower Name	System	Type	Lat	Long	Functionality
Rocky Butte	VHF	Tx, Rx	45-32-28.4 N	122-33-59.3 W	Receiver and a transmitter each for Roads, Animal Services, And Emergency Management
Council Crest	VHF	Rx	45-29-57.0 N	122-42-30.0 W	Receivers for Roads and Animal Services
Willalatin Tank	VHF	Rx	45-34-49.6 N	122-47-45.2 W	Receivers for Roads and Animal Services
Biddle Butte	VHF	Rx	45-34-52.4 N	122-12-29.3 W	Receivers for Roads and Animal Services
Yeon Building	VHF	Rx	45-30-37.53 N	122-27-55.30 W	Receiver for Roads only

Day to day, this system is used by Animal Services and Roads and Bridges. Emergency Management and the Health Department also operate frequencies on this system for emergency operations, but they are only used when an incident warrants their use. [2]
Table 002, below, provides channel descriptions

Multnomah County VHF Channel Descriptions

User	Description	Usage	Radio Rx	Tone	Radio Tx	Tone
Health McCoy	Health Department Command Channel (Simplex)	Incident	153.7400	CS	153.7400	CS
Health1	Health Department Tactical Channel (Simplex)	Incident	155.1000	CS	155.1000	CS
Health2	Health Department Tactical Channel (Simplex)	Incident	155.8425	CS	155.8425	CS
Animal Svc	Animal Service Channel (Repeater)	Daily	155.6850	103.5	159.2100	103.5
MC Roads	Roads Channel (Repeater)	Daily	156.2400	123.0	151.1150	123.0
MC Roads	Roads Channel Flagging (Simplex)	Daily	155.7900	123.0	155.7900	123.0
Emergency Mgt.	Emergency Management Command Channel (Repeater)	Incident	158.7300	103.5	153.8600	103.5
Emergency Mgt.	Emergency Management Regional Interoperability Channel	Incident	155.7900	CS	155.7900	CS

[2] The Multnomah County Tactical Radio Plan and associated Tactical Radio Standard Operating Guideline govern this use for the Emergency Management Channel; the Heath Department Channel's use is governed by Tab N – Communications of their Emergency Operations Plan.

City of Portland Public Safety Radio System (800MHz)

The second system utilized by Multnomah County is the City of Portland's Public Safety Radio System. The City of Portland owns and manages an 800MHz trunked radio system which covers approximately 6600 portable radios (4400 Portland/2200 Mutual Aid). The system operates 24 channels on simulcast, 9 IR sites with 5 channels and 1 IR site with 10 channels. Participating agencies include American Medical Response Portland, Bureau of Emergency Communications, City of Portland, Corbett Fire District 14, Fairview Police, Gresham Fire, Gresham Office of Emergency Management, Gresham Police, LifeFlight, Multnomah County Emergency Management, Multnomah County EMS, Multnomah County Sheriff, Port of Portland, Port of Portland Fire, Port of Portland Police, Portland Emergency Operations Center, Portland Fire Bureau, Sauvie Island Fire District, and Troutdale Police.

Interoperability

Intra-departmental – Within County departments, all VHF radios have been programmed with the Animal Services, Roads, and MCEM channels. The Multnomah County Tactical Radio Standard Operating Guideline identifies the Multnomah County Emergency Management channel as the primary channel for interdepartmental communications.

Intra-agency – Among response agencies such as Portland Bureau of Emergency Management (PBEM), Gresham Emergency Management, the Multnomah County Sheriff's Office, Portland Police and Portland Fire, the 800MHz system is preferred. Multnomah County Emergency Management Radios are programmed with all likely response partner channels[3].

Additionally, both VHF and 800MHz radios operated by MCEM are programmed with regional, state and federal interoperability channels.

Interoperability Chart

Multnomah County
Interoperability Channels

800 MHz

National	State	Region	Agency
8CALL90 – NPSPAC calling 8TAC91 – NPSPAC Tactical 1 8TAC92 – NPSPAC Tactical 2 8TAC93 – NPSPAC Tactical 3 8TAC94 – NPSPAC Tactical 4	**Oregon** OROPS1 (Fire/EMS) OROPS2 (Law Enforcement) OROPS3 (Local Government) OROPS4 (Fire/EMS) OROPS5 (Law Enforcement) **Washington** WAOPS1 (Fire/EMS) WAOPS2 (Law Enforcement) WAOPS3 (Local Government) WAOPS4 (Fire/EMS) WAOPS5 (Law Enforcement)	MULTA MULTB MULTC CLARKA CLARKB CLARKC CLACKA CLACKB CLACKC WASHA WASHB WASHC WASHD	Comm1 (?) Comm2 (?) (?)Check with MCSO on the purpose of these channels.

VHF

Agency	Region	State	National
Emerg Mgt Animal Svc Road Svc	No regional VHF Channels	**Oregon** ODF Direct – Wildland Fire ODF Red – Wildland Fire ODFTAC2 – Wildland Fire ODFTAC3 – Wildland Fire ODFTAC4 – Wildland Fire ODFTAC5 – Wildland Fire OSAR (Search and Rescue) OPEN (OR Police Emerg. Net) Oregon State Fire CH16 (Marine Band) CH22 (Marine Band) **Washington** RedNet – WA Fire net LERN – WA Law Agencies OSCCR Command (Fire) DNR Rptr 5 Clark 8 Clark 6 SkamaniaTac (PD/FIRE/EMS) CowlitzOps4 CowlitzTac9 HEAR (EMS, Fire, Hospitals) Marine16 – calling ch only Marine22A – Coast Guard WA State SAR DNR Common DNRTac1 – OR WhiteNet DNRTac2 – OR RedNet DNR Air – Fire Command 2 - Fire	VCALL10 VTAC11 VTAC12 VTAC13 VTAC14 VTAC33 VTAC34 VTAC35 VTAC36 VTAC37 VTAC38

Channels in **gray** are not currently programmed into Multnomah County Emergency Management Radios

[3] With the exception of City of Gresham Emergency Management Channels. As of November 2012, MCEM was planning to re-flash their radios to include these talk-groups.

Appendix 3: Multnomah County Radio Templates for VHF and 800MHz Systems

	Mobile Radios					
Channel	**User**	**Tx Freq.**	**Tx PL**	**Rx Freq.**	**Rx PL**	**Spacing**
1	Roads	151.1150	123.0	156.2400	123.0	12.5
2	Animal Svc.	159.2100	103.5	155.6850	103.5	12.5
3	Emerg. Mgt.	153.8600	103.5	158.7300	103.5	12.5
4	W Flag 1	156.0450	114.8	156.0450	114.8	12.5
5	W Flag 2	155.7900	114.8	155.7900	114.8	12.5
6	C Flag 1	156.0450	127.3	156.0450	127.3	12.5
7	C Flag 2	155.7900	127.3	155.7900	127.3	12.5
8	E Flag 1	156.0450	141.3	156.0450	141.3	12.5
9	E Flag 2	155.7900	141.3	155.7900	141.3	12.5
10	W Survey	153.7400	114.8	153.7400	114.8	12.5
11	C Survey	153.7400	127.3	153.7400	127.3	12.5
12	E Survey	153.7400	141.3	153.7400	141.3	12.5
13	Striper	153.7400	173.8	153.7400	173.8	12.5
14	McCoy Hlth	153.7400	192.8	153.7400	192.8	12.5
15	MC Hlth 1	155.1000	CS	155.1000	CS	12.5
16	MC Hlth 2	155.8425	CS	155.8425	CS	12.5
17	SET	158.7300	123.0	158.7300	123.0	12.5
18	Parks	153.7400	103.5	153.7400	103.5	12.5
19	Oxbow	153.7400	156.7	153.7400	156.7	12.5
20	Fview PD	154.8225	88.5	154.8225	88.5	12.5
21	Tdale PD	154.9950	127.3	154.9950	127.3	12.5
22	Wood Vill	159.8100	103.5	151.9850	103.5	12.5
23	ClmbiaCo. Rds.	159.0525	88.5	154.9800	167.9	12.5
24	SAR	155.8050	CS	155.8050	CS	12.5
25	OPEN	155.4750	CS	155.4750	CS	12.5
26	VCALL10	155.7525	156.7	155.7525	CS	12.5
27	VTAC11	151.1375	156.7	151.1375	CS	12.5
28	VTAC12	154.4525	156.7	154.4525	CS	12.5
29	VTAC13	158.7375	156.7	158.7375	CS	12.5
30	VTAC14	159.4725	156.7	159.4725	CS	12.5
31	VTAC36	159.4725	136.5	151.1375	CS	12.5
32	NOAA	N/A	N/A	162.5500	CS	25.0

R0130	MOD MCEM		**800 MHz Radios for MCEM**	
Text37	Zone Knob Position	DEC	12 CHAR ALIAS	TALKGROUP NAME
1	A01	801811	ECC 1 POEM	PORTLAND EOC 1
2	A02	801813	ECC 2 MGMT	PORTLAND EOC 2
3	A03	801815	ECC 3 CORD	PORTLAND EOC 3
4	A04	801817	ECC 4 PLNG	PORTLAND EOC 4
5	A05	801819	ECC 5 LGST	PORTLAND EOC 5
6	A06	801821	ECC 6 FINC	PORTLAND EOC 6
7	A07	801823	ECC 7 PIO	PORTLAND EOC 7
8	A08	801825	ECC 8 SFTY	PORTLAND EOC 8
9	A09	801827	ECC 9 DPC	PORTLAND EOC 9
10	A10	801829	ECC10 LIAS	PORTLAND EOC 10
11	A11	801831	ECC11 MSG	PORTLAND EOC 11
12	A12	801833	ECC12 F CP	PORTLAND EOC 12
13	A13	801835	ECC13 TLK1	PORTLAND EOC 13
14	A14	801837	ECC14 TLK2	PORTLAND EOC 14
15	A15	801839	ECC15 TLK3	PORTLAND EOC 15
16	A16	800207	EOC METRO	EOC METRO
17	B01	801809	PF DISP	TAPOUT
18	B02	800283	PF OPS 1	OPS 1
19	B03	800285	PF OPS 2	OPS 2
20	B04	800287	PF OPS 3	OPS 3
21	B05	800289	PF OPS 4	OPS 4
22	B06	800291	PF OPS 5	OPS 5
23	B07	800293	PF OPS 6	OPS 6
24	B08	800295	PF OPS 7	OPS 7
25	B09	800095	PF OPS 8	OPS 8
26	B10	800097	PF OPS 9	OPS 9
27	B11	801199	PF OPS 10	OPS 10
28	B12	801201	PF OPS 11	OPS 11
29	B13	801203	PF OPS 12	OPS 12
30	B14	786	SIMPLEX 1	SIMPLEX 1 (CC)
31	B15	641	REPEAT 1	REPEAT 1
32	B16	643	REPEAT 2	REPEAT 2
33	C01	800909	WB DISP	WATER MAIN
34	C02	800895	WB EOC 1	WB EOC 1
35	C03	800897	WB EOC 2	WB EOC 2
36	C04	800865	WB EOC 3	WB EOC 3
37	C05	800885	WB EOC 4	WATER TAC 4
38	C06	800901	WB SURV 1	SURVEY 1
39	C07	800875	WB TAC 1	WATER TAC 1
40	C08	800877	WB TAC 2	WATER TAC 2
41	C09	800883	WB TAC 3	WATER TAC 3

42	C10	800885	WB TAC 4	WATER TAC 4
43	C11	800887	WB SEC 1	WB SECURITY 1
44	C12	800889	WB SEC 2	WB SECURITY 2
45	C13	800891	WB SEC 3	WB SECURITY 3
46	C14	800893	WB SEC 4	WB SECURITY 4
47	C15	800869	SANDY RIVR	SANDY RIVER
48	C16	800000	REWARD	DYNAM RG-REWARD
49	D01	800327	BOM DISP	MAIN DISPATCH
50	D02	800329	BOM MGMT	MANAGEMENT
51	D03	800333	BOM SUPPRT	SERV / SUPT
52	D04	800345	BOM STRUCT	STRUCTURES
53	D05	800303	BOM TAC 1	BOM TACTICAL 1
54	D06	800305	BOM TAC 2	BOM TACTICAL 2
55	D07	800307	BOM TAC 3	BOM TACTICAL 3
56	D08	800309	BOM TAC 4	BOM TACTICAL 4
57	D09	800311	BOM TAC 5	BOM TACTICAL 5
58	D10	800313	BOM TAC 6	BOM TACTICAL 6
59	D11	800315	BOM TAC 7	BOM TACTICAL 7
60	D12	800317	BOM TAC 8	BOM TACTICAL 8
61	D13	800319	BOM TAC 9	BOM TACTICAL 9
62	D14	800321	BOM TAC 10	BOM TACTICAL 10
63	D15	800343	BOM STREET	STREET REPAIR
64	D16	800337	BOM SEWER	SEWER REPAIR
65	E01	800221	BES CCB	BES/CCB CNTRL ST
66	E02	800231	BES SPILL	BES SPILL RESPON
67	E03	800235	BES OPS 1	BES OPER/MAINT 1
68	E04	802003	BDS 1	BDS 1
69	E05	800365	PARK MAIN	DISTRICTS MAIN
70	E06	800377	PARK FORST	FORESTRY
71	E07	800371	PARK SECUR	OPERATIONS
72	E08	800203	CITY CALL	CITY WIDE CALL
73	E09	800205	CITY TAC	CITY WIDE TAC
74	E10	801013	USCG	USCG
75	E11	801143	RED CROSS	RED CROSS
76	E12	800975	ACOE	ARMY CORPS OF EN
77	E13	801125	PGE	PGE
78	E14	801139	PAC POWER	PPL
79	E15	801071	NW NATURAL	NW NATURAL GAS
80	E16	801721	PPS DISP	PPS DISPATCH
81	F01	801545	PDX F DISP	AV-FIRE DISPATCH
82	F02	801535	AV ICS	AIRPORT ICS
83	F03	801533	PDX EOC	AIRPORT EOC
84	F04	801547	PDX OPS 15	AV FIRE TAC 1
85	F05	801549	PDX OPS 16	AV FIRE TAC 2
86	F06	801551	PDX OPS 17	AV FIRE TAC 3
87	F07	801553	PDX OPS 18	AV FIRE TAC 4

88	F08	801633	AV POLICE	PDX POLICE DISP
89	F09	800967	AIR GUARD	AIR NAT GUARD
90	F10	801763	MAX DISP	MAIN LINE 1
91	F11	801743	T-MET ICS	TRI-MET ICS
92	F12	801771	RAIL SUPS	RAIL SUPERVISORS
93	F13	801765	MAX 2	MAIN LINE 2
94	F14	801777	BUS DISP	BUS
95	F15	801775	MAX SECUR	RAIL SECURITY
96	F16	801073	ODOT DISP	ODOT DP 1 2A
97	G01	800467	CE DP	CENTRAL DISPATCH
98	G02	800591	SE DP	SE DISPATCH
99	G03	800669	NO DP	NORTH DISPATCH
100	G04	800797	EA DP	EAST DISPATCH
101	G05	801911	NE DP	NE DISPATCH
102	G06	800471	CE T1	CENTRAL TACT 1
103	G07	800475	CE T2	CENTRAL TACT 2
104	G08	800595	SE T1	SE TAC 1
105	G09	800599	SE T2	SE TAC 2
106	G10	800675	NO T1	NORTH TAC 1
107	G11	800679	NO T2	NORTH TAC 2
108	G12	800803	EA T1	EAST TAC 1
109	G13	800807	EA T2	EAST TAC 2
110	G14	801915	NE T1	NE TAC 1
111	G15	801917	NE T2	NE TAC 2
112	G16	801087	OSP 1	OSP 1
113	H01	800011	MULT A	MULT A
114	H02	800013	MULT B	MULT B
115	H03	800015	MULT C	MULT C
116	H04	801301	MCSO DISP	MCSO NET 4
117	H05	800541	MULAW 1	LAW 1 PORTLAND
118	H06	800023	MULAW 2	LAW 2 PORTLAND
119	H07	801305	MCSO RIV P	MCSO RIV PAT 1
120	H08	801297	COMM 1	COMM 1
121	H09	800021	COMM 2	COMM 2
122	H10	801331	MC BRIDGE	BRIDGE MAINT
123	H11	801337	MC ROADS	ROAD MAINTENANCE
124	H12	802249	MDD DISP	MDD DP
125	H13	802251	MDD OPS 1	MDD OP1
126	H14	802253	MDD OPS 2	MDD OP2
127	H15	800031	GES	DES BASE
128	H16	800951	TRTDALE PW	PUBLIC WORKS ADM
129	I01	804041	CLACK A	CLACK CO PS 1
130	I02	804039	CLACK B	CLACK CO PS 2
131	I03	803597	CLACK C	LAKE O PS1
132	I04	803213	CCOM F DSP	CLACK CO FIRE DP
133	I05	803209	OPS 22	CLACK CO FD TAC2

134	I06	803207	OPS 23	CLACK CO FD TAC3
135	I07	803205	OPS 24	CLACK CO FD TAC4
136	I08	803203	OPS 25	CLACK CO FD TAC5
137	I09	803201	OPS 26	CLACK CO FD TAC6
138	I10	803199	OPS 27	CLACK CO FD TAC7
139	I11	803197	OPS 28	CLACK CO FD TAC8
140	I12	803179	OPS 29	CC OPS 29
141	I13	804057	CCOM 1	CLACK CO LAW 1
142	I14	804055	CCOM 2	CLACK CO LAW 2
143	I15	804053	CCOM 3	CLACK CO LAW 3
144	I16	803191	LOCOM F DP	LAKE O FIRE DP
145	J01	803017	CLARK A	CLARK A
146	J02	803019	CLARK B	CLARK B
147	J03	803021	CLARK C	CLARK C
148	J04	803001	EOC 51	ECC 1
149	J05	803003	EOC 52	ECC 2
150	J06	803005	EOC 53	ECC 3
151	J07	803007	EOC 54	ECC 4
152	J08	803009	EOC 55	ECC 5
153	J09	803011	EOC 56	ECC 6
154	J10	803013	EOC 57	ECC 7
155	J11	803015	EOC 58	ECC 8
156	J12	716	WAOPS1	WASH FIRE/EMS T1
157	J13	718	WAOPS2	WASH LAW TAC 1
158	J14	720	WAOPS3	WASH LOCAL GOV 1
159	J15	722	WAOPS4	WASH FIRE/EMS T2
160	J16	724	WAOPS5	WASH LAW TAC 2
161	K01	802703	FIRE TAP	FIRE TAP
162	K02	802701	FIRE COMM	FIRE COM
163	K03	802801	OPS 51	TAC 1
164	K04	802803	OPS 52	TAC 2
165	K05	802805	OPS 53	TAC 3
166	K06	802807	OPS 54	TAC 4
167	K07	802809	OPS 55	TAC 5
168	K08	802717	OPS 56	TAC 6
169	K09	802719	OPS 57	TAC 7
170	K10	802721	OPS 58	TAC 8
171	K11	802723	OPS 59	TAC 9
172	K12	802725	OPS 60	TAC 10
173	K13	802727	OPS 61	TAC 11
174	K14	800007	FUTURE	FUTURE USE
175	K15	800007	FUTURE	FUTURE USE
176	K16	800007	FUTURE	FUTURE USE
177	L01	803345	WASH A	PS1
178	L02	803343	WASH B	PS2
179	L03	803341	WASH C	COMMON PS 3

180	L04	803165	WCF DISP	DISP
181	L05	803161	OPS 32	TAC2
182	L06	803159	OPS 33	TAC3
183	L07	803157	OPS 34	TAC4
184	L08	803155	OPS 35	TAC5
185	L09	803153	OPS 36	TAC6
186	L10	803163	OPS 37	TAC7
187	L11	800007	FUTURE	FUTURE USE
188	L12	800007	FUTURE	FUTURE USE
189	L13	800007	FUTURE	FUTURE USE
190	L14	800007	FUTURE	FUTURE USE
191	L15	800007	FUTURE	FUTURE USE
192	L16	800007	FUTURE	FUTURE USE
193	M01	801871	HOSPAC	HOSPAC
194	M02	801217	M-GS	GOOD SAM
195	M03	801241	M-UH	UNIV OF OREGON
196	M04	801225	M-VA	PORTLAND VETERAN
197	M05	801215	M-EM	EMANUEL
198	M06	801229	M-PR	PROVIDENCE
199	M07	801223	M-PA	PORTLAND ADVENT
200	M08	801221	M-MH	MT. HOOD MED CTR
201	M09	801233	C-SK	SUNNYSIDE KAISER
202	M10	801227	C-PM	PROV MILWAUKIE
203	M11	801243	C-WF	WILLAMETTE FALLS
204	M12	803225	W-MP	MERIDAN PARK WCC
205	M13	803219	W-TH	TUALIT HOSP F GV
206	M14	803223	W-SV	ST VINCENT WCCCA
207	M15	800007	FUTURE	FUTURE USE
208	M16	800007	FUTURE	FUTURE USE
209	N01	801193	EMS DISP	EMS DISPATCH
210	N02	801041	HEAR	HEAR SYSTEM
211	N03	801197	MRH	MRH
212	N04	801207	TRAUMA	TRAUMA
213	N05	801195	EMSMCI	EMSMCI
214	N06	801055	LIFEFLIGHT	LIFEFLIGHT
215	N07	801081	REDNET	OR DEPT FORESTRY
216	N08	801169	USFS	USFS
217	N09	801069	NOAA	NOAA
218	N10	802329	WAVE SAR	MOUNTAIN WAVE
219	N11	802237	MCEM ICS 1	MULTNOMAH COUNTY
220	N12	802239	MCEM ICS 2	MULTNOMAH COUNTY
221	N13	802241	MCEM ICS 3	MULTNOMAH COUNTY
222	N14	802243	MCEM ICS 4	MULTNOMAH COUNTY
223	N15	802245	MCEM ICS 5	MULTNOMAH COUNTY
224	N16	801047	HOOD RIV FI	MULTNOMAH COUNTY
225	O01	801155	ST FIRE	STATE FIRE NET

226	O02	601	8CAL90	NATIONAL CALLING
227	O03	639	8TAC91	NATIONAL TAC 1
228	O04	677	8TAC92	NATIONAL TAC 2
229	O05	715	8TAC93	NATIONAL TAC 3
230	O06	753	8TAC94	NATIONAL TAC 4
231	O07	625	OROPS1	OREGON FIRE/EMS1
232	O08	630	OROPS2	OREGON LAW TAC 1
233	O09	657	OROPS3	OREGON LOCAL GOV
234	O10	659	OROPS4	OREGON FIRE/EMS2
235	O11	661	OROPS5	OREGON LAW TAC 2
236	O12	786	SIMPLEX 1	SIMPLEX 1 (CC)
237	O13	602	SIMPLEX 2	SIMPLEX 2 (CC)
238	O14	673	SIMPLEX 3	SIMPLEX 3 (CC)
239	O15	613	SIMPLEX 4	SIMPLEX 4 (CC)
240	O16	800007	T R0130A	FUTURE USE

Appendix 4 - Job Aids for Radios

VHF Radio System

MCEM (Channel 1)

Chair's Office, Department Incident management Teams, Emergency Management

Tune Radio to ***channel 1*** *and say the following:*

"This is (name) from (department) trying to reach Emergency Management Staff. Is emergency management currently monitoring this channel?"

Tips

- Wait for a break in radio traffic before chiming in
- Push and hold button for 1 sec before talking, continue to hold until after you've finished speaking
- Be sure to identify yourself and the department you represent

Monitoring

- Multnomah County Emergency Management does not regularly monitor the radio.
- Use the radio to contact emergency management only if telephone and internet are unavailable
- If you are able to contact emergency management by radio, they can provide a briefing on who else can be contacted via your radio

Activation

Criteria

Land-based and cellular telephone are unavailable,
Internet is unavailable,
800mHz and or VHF radio is working

Authority

Plan can be activated by the following individuals:
Emergency Management Director
Emergency Management Duty Officer
Emergency Coordination Center Manager

Notification

Once activated, broadcast the following on **both** VHF and 800

"This is _____ from Multnomah County Emergency Management on MCEM Repeater/ ECC Metro. Multnomah County has activated its tactical radio plan and Emergency Management Staff will be monitoring this channel for the duration of plan activation."

VHF System

MCEM (Channel 1)

Primarily intra-departmental
Chair's Office, Department IMTs, ECC

800 MHz System

ECC Metro (Zone 1, Ch 16)

Primarily external partners
PBEM and Gresham EM

Maintenance

- Complete Call-downs at least once per operational period
- Be sure to document who has been contacted

Multnomah County Tactical Radio Plan *Activation Guide*

Plan Activation Date/ Time _____
VHF Notification Time _____
800mHz Notification Time _____
Individuals/Agencies Contacted:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Call-down Date/Time _____
Individuals/Agencies Contacted:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Agency Contacts

800mHz

Response Partners
Portland EM
Gresham EM
Clark Co. EM
Clackamas Co. EM
Columbia Co. EM
Washington Co. EM

VHF

County Departments
Chair's Office
ECC Staff
Health Department
DCHS
Sheriff's Office
Roads and Bridges
Animal Services

Tips

- *Use plain English*
- *Push button for 1 sec before talking*
- *To improve reception, move outside or to high ground*

Remember to monitor both VHF and 800mHz

Appendix 5: Definitions

Call-Down-- Radio roll call of all departments, sections, or buildings
GHz---- Giga-Hertz (a really big number)
HF------ High Frequency from 3MHz to 30MHz (actually lower frequencies)
Hz------ Hertz; Frequency, also known as Cycles per second
MCEM-- Multnomah County Emergency Management
MHz---- Mega-Hertz (million cycles per second)
OPEN--- Oregon Police Emergency Net
PBEM-- Portland Bureau of Emergency Management
PTT----- Push-To-Talk (the push button to switch from receiving to transmitting)
Template-- A list or chart of radio frequencies or channels in a radio
Tactical----- Quick or important messaging or information
UHF---- Ultra High Frequency from 300MHz to 3000MHz (3GHz)
VHF---- Very High Frequency from 30MHz to 300MHZ
800 MHz System--- City of Portland Trunked Radio System