

# HOUSE COMMITTEE ON VETERANS AND EMERGENCY PREPAREDNESS

MAY 16, 2017 TESTIMONY BY JOHN CORE, OREGON SECTION AMERICAN RADIO  
RELAY LEAGUE ON THE AMATEUR RADIO EMERGENCY SERVICE



# PURPOSE:

- “REVIEW POSSIBLE POLICIES AND INVESTMENTS UTILIZING WORKGROUPS TO FIND “GROUND-TRUTHS” ABOUT CRITICAL FACTORS RELATED TO OUR OVERALL STATE OF RESILIENCE IN AMATEUR RADIO STRUCTURE/SYSTEMS FOR RESPONSE AND RECOVERY EFFORTS”

## WORKGROUP CHARGE:

- 1. IDENTIFY STAKEHOLDERS
- 2. EVALUATE EXISTING CAPABILITIES
- 3. IDENTIFY PRIORITY ACTIONS/INVESTMENTS
- 4. ESTABLISH CONVERSATIONS RE: FUTURE STUDIES/ACTIONS

# CASCADIA EVENT COMMUNICATIONS

- TWO-THIRDS OF “NORMAL COMMUNICATIONS” WILL BE OUT INCLUDING CELL PHONES, TEXT, INTERNET, PUBLIC SAFETY RADIO, (FEMA AAR)
- POWER & INTERNET WILL BE OUT, 10 MILLION PEOPLE WITHOUT COMMUNICATIONS (RESILIENCY PLAN 2013)
- FM AND TV STATIONS BADLY DAMAGED, LIMITING PUBLIC NOTIFICATION OF EMERGENCY BROADCASTS



# AMATEUR RADIO : WHEN ALL ELSE FAILS ?

- “AMATEUR RADIO MAY BE OUR ONLY RELIABLE COMMUNICATIONS LINK FOR DAYS, IF NOT WEEKS” – OEM AAR
- BUT: WE ARE INTENDED TO BE A BACKUP COMMUNICATIONS SERVICE, NOT THE PRIMARY PROVIDER.
- TOO FEW TRAINED OPERATORS, DIFFICULT TO GET TO THE EOCS AND NOT NEARLY ENOUGH HAMS INVOLVED IN PUBLIC SERVICE TO MEET THE DEMAND
- WE NEED TO GREATLY INCREASE THE NUMBER OF AMATEURS IN PUBLIC SERVICE, TRAIN & DRILL THEM.



# EXISTING CAPABILITIES

- PAST SIMULATED EMERGENCY TESTS
  - SCHEDULED MONTHS IN ADVANCE
  - FIELD OPERATIONS ON EMERGENCY POWER FOR UP TO 24 HOURS
  - 300 VOLUNTEERS IN 20-25 COUNTIES
  - LOCAL, COUNTY AND STATE LEVEL COMMUNICATIONS BY RADIO, ONLY
  - WE HAVE DELIVERED 1 MESSAGE PER MINUTE TO OEM USING DIGITAL RADIO DURING SETS LASTING 4-5 HOURS.
- EMERGENCY MANAGERS WANT: TRAINED, DEPENDABLE, SUSTAINABLE, EFFECTIVE COMMUNICATIONS SYSTEMS



# FIVE AREAS THAT NEED IMPROVEMENT

1. GOVERNESS: AMATEUR RADIO GROUPS ARE NOT WELL COORDINATED
2. VOLUNTEERS: TOO FEW AMATEURS ARE IN PUBLIC SERVICE. A BIG PROBLEM.
3. TRAINING: THERE IS A CONTINUING NEED FOR TRAINING COMMON TO ALL
4. RADIO EQUIPMENT: A NEED TO UPDATE AND MAINTAIN WHAT WE NOW HAVE
5. NEW TECHNOLOGY: WE NEED TO UPGRADE TO CURRENT HIGH SPEED MESH NETWORKS AND EXPAND OPERATIONS TO USE “SHARES” FREQUENCIES.

# 1. GOVERNESS: WHO USES AMATEUR RADIO?

County & City EOCs, Statewide	Hospitals: Portland, Salem, Bend, Redmond, Albany, Others	Portland Fire & Rescue, Tualatin Valley Fire, Others
Portland General Electric	Bonneville Power Admin.	Oregon Dept. Transportation
Colleges/Community Colleges	Community and Neighborhood Emergency Response Teams, Statewide	Oregon Food Bank and American Red Cross
Search & Rescue Groups: Mountain Wave and Sheriff's Offices	LDS and other church groups	Other Service Groups: Lane County Sheriff's Office Amateur Radio, Marion County Jeep Patrol.
New: Oregon Dept. Aviation	New: Oregon Health Authority	

# 1. GOVERNANCE: A NEED TO WORK TOGETHER

- A FORUM TO DISCUSS AREA OF COMMON CONCERN, COORDINATE TECHNOLOGY – INTEROPERABILITY ISSUES; CONDUCT TRAINING AND RECRUITMENT.
- THERE IS A NEED FOR FAR MORE EMERGENCY MANAGER – AMATEUR RADIO COOPERATION AND JOINT TRAINING EXERCISES (OEM AAR) THAT INCLUDE FEMA.
- BUILDING STRONG RELATIONSHIPS WITH OEM AND COUNTY EMERGENCY MANAGERS AND AMATEUR VOLUNTEERS IS IMPORTANT.

## 2. AMATEUR RADIO PUBLIC SERVICE VOLUNTEERS

- ABOUT 3% OF 18,000 AMATEURS IN OREGON ARE IN PUBLIC SERVICE. A FOCUSED, PROFESSIONAL EFFORT IS NEEDED TO BRING MORE INTO SERVICE. WE NOW HAVE FAR TOO FEW TO RESPOND DURING A MAJOR DISASTER.
- THIS MUST BE A LONG-TERM EFFORT; MUST RE-BRAND HAM OPERATORS AND MUST ENERGIZE VOLUNTEERS TO BE PROUD OF THE SERVICE THEY PROVIDE.



# ON DISASTER VOLUNTEERS

- “THE ABILITIES OF VOLUNTEER OPERATORS MUST BE RECOGNIZED AND ACCOUNTED FOR BY THE EMERGENCY MANAGERS THEY SERVE. ENHANCEMENT OF THOSE ABILITIES MUST BE GUIDED AND FUNDED TO PROVIDE FOR THE NEEDS OF THE EMERGENCY MANAGER’S MISSION”
- “RETAINING TRAINED VOLUNTEERS IS CRITICAL”
  - *N. HERSEY, MULTNOMAH EC*



# 3. TRAINING

- EVERYBODY WANTS MORE DRILLS AND TRAINING OPPORTUNITIES. FOR VOLUNTEERS IT HAS TO BE FUN.
- NOT ALL VOLUNTEERS WANT FORMAL CLASSROOM TRAINING.
- DEVELOPING AND DELIVERING TRAINING IS DEMANDING. FUNDING EMERGENCY MANAGERS TO CONDUCT LOCAL DRILLS IS IMPORTANT.
- GREATER EMERGENCY MANAGEMENT INVOLVEMENT IN SETS IS CRITICAL.



## 4. EQUIPMENT

- MOST COUNTY EOC EQUIPMENT IS NOW NEARLY 10 YEARS OLD WITH NO PLAN TO REPLACE IT. MUCH FASTER DIGITAL TECHNOLOGY IS NOW AVAILABLE TO DOUBLE THE SPEED OF MESSAGE DELIVERY.
- THE 2008 NETWORK NEEDS TO BE EXPANDED AND MORE “GO-KITS” ARE NEEDED THROUGHOUT THE STATE TO PROVIDE FAST RESPONSE CAPABILITIES.
- EMERGENCY POWER GENERATORS, BATTERIES AND SOLAR PANEL SYSTEMS ARE A CRITICAL NEED.



## 5. NEW TECHNOLOGIES

- A. HIGH SPEED DATA ON WIRELESS NETWORKS: AN ALTERNATIVE TO INTERNET
  - A. OPERATES ON AMATEUR RADIO BANDS, COULD CONNECT EOCS IF INTERNET IS DOWN. NOW IN USE IN SEVERAL CITIES.
  
- B. SHARES HF CHANNELS NOW AVAILABLE: NO HAM RADIO LICENSE REQUIRED, AVAILABLE TO COUNTY/STATE EMERGENCY MANAGEMENT AGENCIES, POWER UTILITIES, OTHERS.  
EMPLOYEES CAN OPERATE SHARES RADIOS WHEN TRAINED

# FINALLY....

- A NEED FOR A NEW LOOK AT AMATEUR RADIO EMERGENCY COMMUNICATIONS: ITS NOT JUST HOBBY RADIO ANYMORE

