



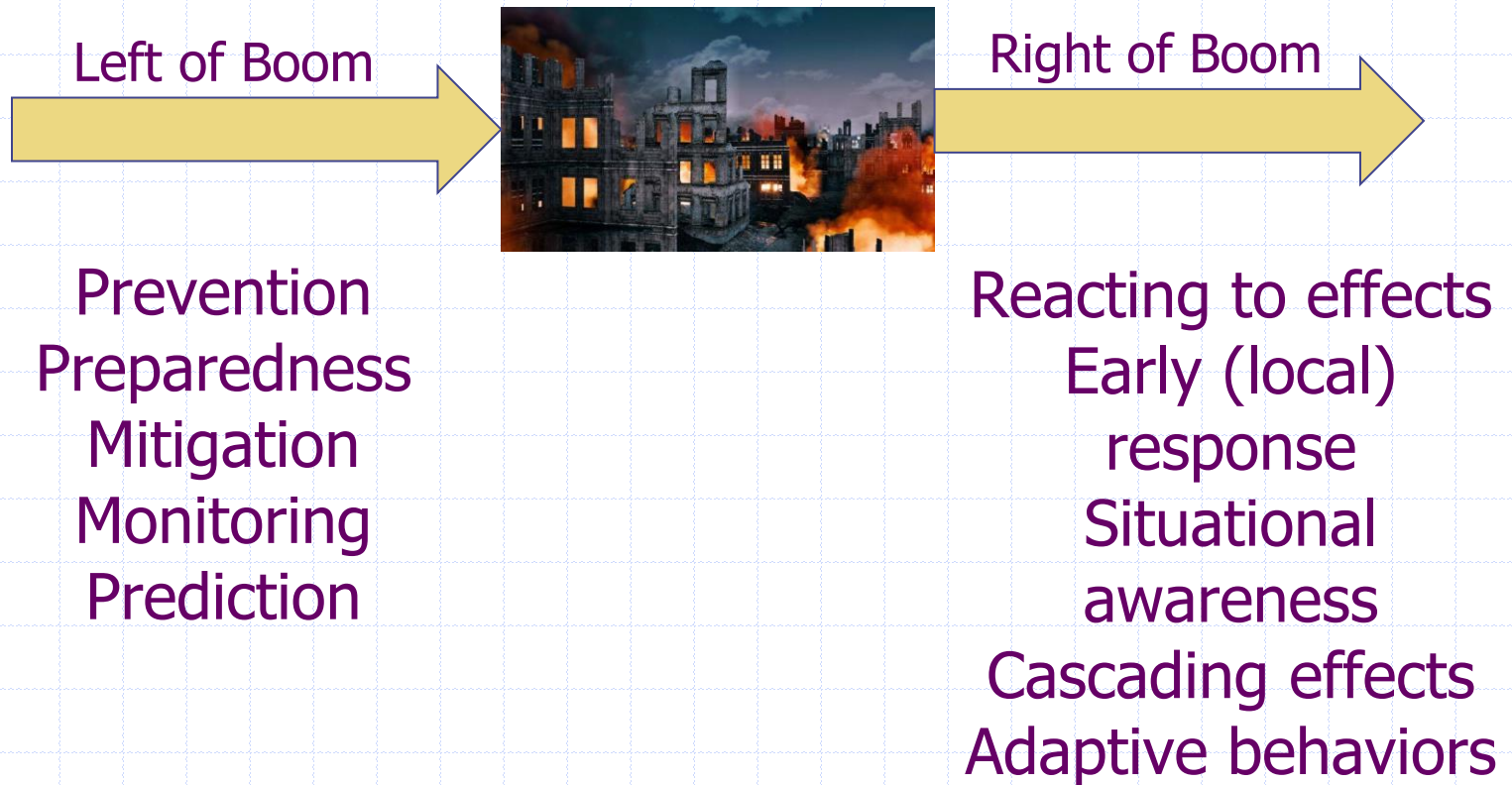
# LEAVE NOW!

## What to Take & How to Best Contribute

SEA-PAC 2022  
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# RIGHT of BOOM













# CONVERSATION

1. Perception of amateur radio support
2. Outline tools now in use by emergency management
3. Individual immediate response
4. Discuss ways in which the value of amateur radio can be optimized – New perception







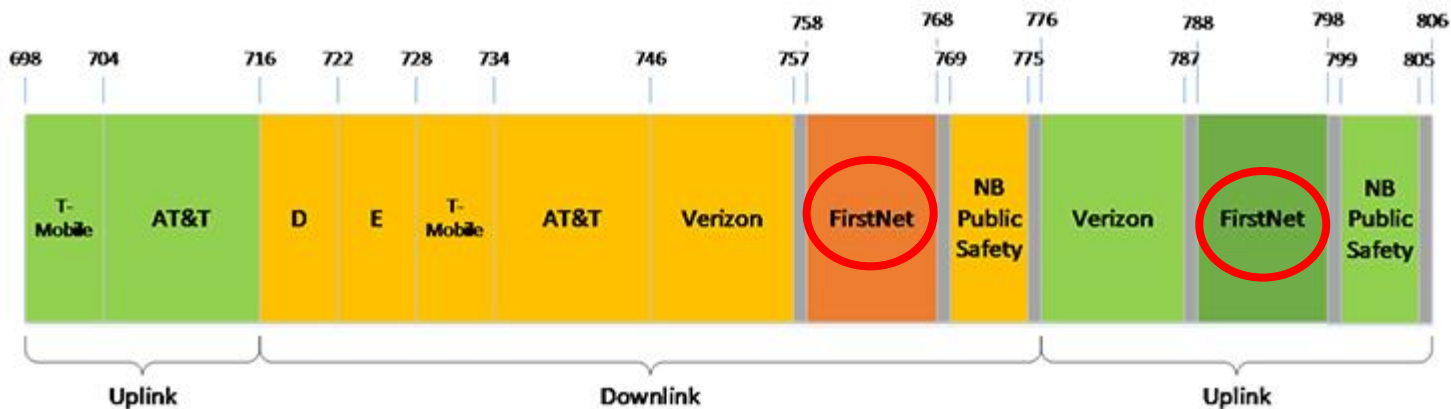
# Post 9/11 Emergency Management Communication Systems



# Cellular Telephony



1. Federal program
2. Reserved portion of cell spectrum
3. Targeted at First Responders



# Trunked Radio Systems



# VHF/UHF Radio Caches



- Requires programming upon arrival - AuxComm
- 'Must-Have' federal interoperable channels
- Potential for loss, diversion
- May include secure modes

# Iridium Satellite



- Low Earth Orbit (LEO) satellite constellation
- PTN and SMS
- Must have an open, wide view of sky
- Low burden - size and weight
- Costly airtime

# MSAT-G2 Satellite with Repeater



- Geostationary satellite constellation
- PTT voice and PTN
- Can be packaged with crossband repeater
- Not worldwide
- Limited data
- Less costly airtime



# BGAN Satellite



- Geostationary satellite constellation
- Data only (~500 Kbps)
- Supports ROIP voice
- Worldwide on INMARSAT network
- Costly airtime

# STARLINK Satellite



- Low Earth Orbit (LEO) satellite constellation
- Data only (~100 Mps)
- Supports ROIP voice
- Must have an open, wide view of sky
- Fixed cost (~\$125/mo.)

# FEDERAL HF-SSB



- SHARES
- High-power HF-SSB
- Preset ALE channels
- Requires antenna system - large
- Uncommon in field environment

# ACU-M

## 4-port Interoperability system



- Networks up to four radios
- Multiple units can be linked using internet
- Smartphone APP
- Can easily network commercial, government and amateur radio

# FEMA MERS



# Out the Door

1. Current FCC license and Emer

1. Worker Credentials
2. Evacuate if directed
3. Personal 'Go-bag'
4. Radio 'Go-kit'
5. Meaningful Roles







**DX** ENGINEER







# I. Observe & Report



1. Assist local EM with Situational Awareness
2. NOAA Weather Service *Skywarn*
3. Clark County *Eyewarn*
4. Requested observations of critical infrastructure

## II. Neighborhood Response



1. Federally-supported, locally-managed
2. Typically utilize FRS/GMRS
3. Amateur radio supplements comms in a 'hub n' spoke' configuration

# III. Evacuation Center & Shelter Support







## IV. Logistical Support



1. Become 'Volunteers with Communications'
2. Utilize WINLINK and other tools to manage requests and available inventory



# V. Close Critical Comm Gaps



1. Partial failure of public safety systems
2. New needs not anticipated
3. High volume

# CLOSING THOUGHTS

1. Safety of your family highest priority
2. Mobility and flexibility most important
3. To be effective, plan and prepare in collaboration with ESF-2 team - AUXCOMM
4. Let communications be an adjunct role
5. Never freelance