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Revision Number	Revision Date	Description of Revision	Author	
1.0	06May2020	Initial Issue.	LW	
1.1	18July2021	Expanded Analog Section.	LW	
1.2	16OCT2022	Edited for clarity, general updates.	LW	
1.3	07JAN2024	Revised section 1.6C to clarify linking of analog repeaters during an emergency.	LW	
1.4	07APR2024	Revised section 1.6 to include GMRS operation.	LW	

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Weston Mountain Digital Radio Association (W7NEO) Comprehensive Emergency Operations Management Plan.

Purpose:

To better enable the W7NEO repeater system (Hereafter referred to as “The system”) to effectively provide a valuable resource to our local community in the event of a natural or man-made disaster by the establishment and clarification of operating procedures and responsibilities. In addition, outlining specifically how the system will and will not be allowed to be utilized by outside interests during such times thereby preserving the core values of our organization.

1.0 General conditions of activation for Amateur Radio:

During times of national emergency the War Powers Act TITLE 47 SECTION §606, in conjunction with applicable FCC regulations within part 97 permit Amateur Radio operators to serve the public by enabling them to legally communicate with non-amateur entities (e.g., FEMA, the National Weather Service, the military). This exception is only granted by Federal authorities in the event of officially declared emergencies and disasters, and when specifically authorized by the civil defense organization (a.k.a. emergency management) for the area served (under RACES protocols). The following are referenced to FCC regulations contained within Title 47, part 97 as they apply to the Amateur Radio Service during emergency operation:

[Title 47 §97.111](#) – Authorized transmissions.

[Title 47 § 97.403](#) - Safety of life and protection of property.

[Title 47 § 97.405](#) - Station in distress.

[Title 47 § 97.407](#) - Radio amateur civil emergency service.

1.1 Definition of National Incident Management System (NIMS)

The National Incident Management System (NIMS) provides a consistent nationwide template to enable partners across the nation to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity. This is a shared responsibility between Federal and local agencies in order to work

with community responders encompassing six elements as outlined within the Presidential Policy Directive ([PPD-8](#)). In the event we as Non-Government Operators (NGO) would be called upon, in cooperation with various Federal, State, and local agencies during times of emergency, we would adhere to the guidelines as stated within the National Incident Management System Section IV Communications and Information Management.

1.2 National Incident Management System (NIMS) Operational response conditions as it applies to NGO entities are as follows:

- A. The incident complexity is NIMS Type 5 or 4, and all communications needs are being handled through commercial services, there is no need for additional communications resources.
- B. When incident complexity reaches NIMS Type 3 or 2, regular communications systems may not be capable of normal capacity in the affected areas. Supplemental Amateur Radio communications resources can fill the gap until regular communications are restored, depending on the quantity of communicators needed and operational periods. Deployment of emergency communications resources from outside the affected jurisdiction(s) is possible.
- C. During major emergencies and disasters (NIMS Type 1 incident complexity), there may be major failures and overloading of the communications infrastructure, including the degradation or loss of the electrical grid, cellular phone network, internet, public safety radio systems, and AM/FM radio systems. In such cases, supplemental emergency communications resources are needed in quantity and for extended periods until regular communications are restored.

*A general description of NIMS operational types can be found [here](#).

1.3 Actions to be taken by WMDRA system administrators/control operators:

NIMS Type 5 or 4.

No action is required, continue to monitor the situation for any changes in status.

NIMS Type 3 or 2

Request that users minimize activity on both analog and digital repeater systems, while making frequent announcements updating users of the status of the emergency. Make every effort to reasonably accommodate individuals that may wish to use the system in order to pass and/or receive emergency traffic. Update NE-OREGON room message board with short posts (limited to 80 characters) in order to inform users of various hazards including but not limited to changing weather, road hazards/closures, etc.

NIMS Type 1

System administrators/control operators shall announce the transition to NIMS Type 1 on both analog and digital repeater systems so as to further improve system access for those stations directly involved in the passing of emergency traffic, particularly during critical periods of communications. Insure that EOC's, and outside organizations understand that although there is no directed net activated on the system the passing of legitimate emergency traffic is permitted, and as such will be given priority.

1.4 Procedures pertaining to how the digital system will be deployed/ utilized during times of emergency:

- a. At no point will any outside organization not authorized under powers granted by 47 U.S.C. §606 be permitted to establish a formal directed net on the repeater system. Local emergency services repeater systems are already available specifically for that purpose, and it is expected that they would be utilized accordingly without the need of the W7NEO repeater system.
- b. At no time will any portion of the digital repeater system be allowed to be included within the Communications Plan of any other organization outside of the association without prior approval of the membership. In the event such approval is granted said organization will understand that policy and guidelines of the use, deployment, and otherwise utilization of the repeater system will remain solely that of the repeater owner, the association, and no others.
- c. In the absence of a directed net being conducted on the system every effort will be made in order to accommodate stations needs involved in communications support activities during the emergency. Post to the WiresX message board of this status, in addition make frequent announcements on the system informing users of the system being in emergency operation mode, with emergency traffic having priority.
- d. Individuals not serving in official capacity pertaining directly to the emergency entering the NE- OREGON room attempting to obtain information shall be directed to contact their local EOC, or other official sources of public information. The WMDRA does not have a Public Information Officer (PIO) position within our organization, nor is it our responsibility for any of our membership to serve in such capacity.
- e. The WMDRA is not in any way to be considered a formal emergency response organization. We instead define our role during times of emergency as a secondary backup communications system to be available for use in the event of an emergency for

the purpose of passing legitimate emergency traffic. Therefore, we should not, under any conditions whatsoever, place ourselves in a situation of self-deployment.

- f. At no time will any militia groups, and/or groups otherwise representing antigovernment and/or racist sentiments within the fundamental ideologies of their organization(s) be permitted access to the system under any circumstance whether real or implied. If individuals representing any such organization(s) are identified on the system, they shall be informed that the association, and the regular users of the system do not cater to their ideologies therefore the system is not available for use by their organization. After having made contact and informed said individual(s) of WMDRA policy pertaining to such ideologies they shall be directed to clear their station(s) from the system immediately. If said individuals refuse to vacate the system as directed, they shall be blocked by a system administrator or control operator with no recourse to be reinstated.
- g. Legitimate emergency traffic will be given priority, however stations with emergency traffic will show reasonable consideration to stations already using the system when requesting use of the system in order to pass traffic. This will be accomplished by the station holding the emergency traffic requesting use of the system in order to pass their traffic, and the occupying station(s) releasing the system to them. Once traffic has been passed, and no further traffic is waiting to be passed stations involved will relinquish the system to normal use.
- h. Regular users of the system will be asked to show consideration during times of emergency by paying particular attention to avoid practices such as tailgating, and/or tying up the system for extended periods of time with non-emergency related conversation, etc.
- i. Malicious interference will in no way be tolerated on the system at any time, for any reason. Stations who deliberately cause interference on the system will be requested to leave the system immediately. If they refuse to leave, they will be blocked with no recourse of reinstatement. In the case of analog repeaters, the repeater will be taken off the air until such time as it has been determined that the interference has passed. If possible, control operators will identify the interfering station, noting the time, frequency, and a brief description of the interference being generated. Afterwards, a report containing date, time, frequency, and a brief description of the incident shall be submitted to the nearest FCC field office.
- j. If proper operation of digital voice equipment is not adequately understood by Amateur Radio personnel manning the EOC then every effort will be made to provide a qualified individual to assist in training EOC personnel. The purpose of this is to minimize unnecessary interference on the repeater system (and other digital voice repeater systems parked in the NE-OREGON room) by EOC personnel. Once training is completed, said individual will be under no obligation

to further assist EOC personnel, but will be free to do so if they feel it is appropriate.

- k. In the event that repeaters are no longer linked due to loss of linking infrastructure those repeaters within the system will be utilized as standalone systems and all of the above operating directives will remain in effect as if they were still linked until such time as the network is restored. Fusion repeaters are perfectly capable of fully functioning as standalone digital voice repeaters without the need for internet connection. Individual coverage by the various repeaters within the network is more than capable of still providing a service to the local community as needed during an emergency. Other repeaters that may have been connected to the NE-OREGON room prior to the loss of linking that are not part of the WMDRA will most likely revert to their own policy doctrine as they deem appropriate until linking is restored. Once linking is again restored, control operators for those machines will be informed that linking has been restored, and that those repeaters will be once again free to rejoin the network as they wish to do so.
- l. In the event that repeaters within the system are operating on emergency battery backup power traffic on the system will then be limited to essential communications only. Control operators shall inform users of repeater status.

1.5 Utilization of various features of the WiresX system:

- A. A bulletin board which is accessible to all users of the system has an emergency section in addition to the local News section. Both can be utilized for posting road hazards, weather conditions, and information in general. Messages can be text, picture, or audio format, with text messages limited to 80 characters. When posting to the local News list section messages can be broadcast to users that have WiresX activated and are connected to the NE-OREGON room. In order for the users to receive the message broadcasts they must have a (>32GB) MicroSD card installed in their radio.
- B. The GPS feature has multiple applications both within and outside the WiresX system. Some radio equipment can display both range and bearing information to other stations active on the system. This feature does not require connection to WiresX in order to function.
- C. When communicating in the NE-OREGON WiresX room GPS position information is displayed as APRS position data on web sites such as aprs.fi. This feature is unique to the NE-OREGON room, and not common in most other WiresX rooms.
- D. Many fusion radios have a fully functional APRS feature built in which APRS data is displayed both on the radio display and web sites such as the afore mentioned.

- E. Stations located outside of the immediate coverage area can connect into the NE-OREGON room as well in order to exchange traffic.
- F. Although Group Mode (GM) is available, it is highly discouraged from being used on the repeater system, but may be used to great advantage in simplex operation.

*Fusion repeaters are fully capable of functioning independent of the internet, however WiresX features are contingent upon the internet being available.

1.6 Policies and procedures as they pertain to analog FM repeaters within the W7NEO system:

In the event of an emergency the following shall be adhered to by those users of analog FM repeaters under direct control of the WMDRA. This will be in addition to policies already stated within this document applicable to the digital repeater system, except in those situations identified as being more practical as they would pertain to analog repeater operation. The following exceptions shall not be applied to or construed in any way either real or implied as being applicable to the digital repeater system, and shall be exclusive only to analog repeater operation.

- A. In the event of a natural and/or man-made emergency, analog repeaters shall avail themselves for the handling of legitimate emergency traffic. GMRS repeaters under direct control of the WMDRA shall avail themselves for emergency traffic while remaining compliant with [FCC Sec 47 C.F.R, Part 95 Subpart E](#). Any instance not specifically addressed within the following will be referenced back to those policies previously stated within the Comprehensive Emergency Management Communication Plan.
- B. In the event of a declared emergency, an announcement will be broadcast over the repeater system indicating that there is an emergency taking place. After which, all W7NEO analog repeaters shall be disconnected from outside linked systems in order to facilitate local emergency communications traffic. Analog repeaters within the W7NEO system shall be linked between one another as necessary in order to provide a communications network for the handling of emergency communications as determined by the control operators. Additional, repeater systems shall be permitted to connect to the W7NEO repeater system in order to aid or to monitor emergency communications as required. This shall be with the understanding that the appropriate protocol and restrictions for emergency communications on the W7NEO repeater system are in effect. Any station refusing to abide by said restrictions, thereby causing deliberate interference, will be immediately disconnected and blocked by control operators from accessing the W7NEO repeater system. Once the emergency has officially ended, and emergency communications are no longer required, the W7NEO repeater system will be returned to normal linked configuration, and normal operation following an announcement of said same on the system can resume.

- C. At no time will any portion of the analog repeater system be allowed to be included within the Communications Plan of any other organization outside of the association without prior approval of the membership. In the event such approval is granted said organization will understand that policy and guidelines of the use, deployment, and otherwise utilization of the repeater system will remain solely that of the repeater owner, the association, and no others.
- D. Net operation or any variation thereof will be strictly regulated on a case-by-case basis and allowed only by prior approval of the association and with specific restrictions IAW policies as outlined and agreed upon by mutual agreement between the association and the organization requesting to conduct net operation. Final determination to allow net operation on the analog repeater system will be based upon the determination of the value, legitimacy, and service to the community during times of emergency of the proposed net. As a condition of being allowed to conduct net operations on the analog repeater system said net shall follow association policies for repeater operation while operating on the analog repeater system. It will be understood that ownership, thereby control of the repeater system will remain solely that of the repeater owner, the association, and no others.
- E. IAW FCC section [47 CFR § 97.119](#), the use of tactical call-signs is not permitted on the system. Stations will identify with their FCC issued call-signs only, after which they can, at their own discretion, identify their specific location if they wish to do so.
- F. Impromptu emergency nets will only be permitted in extreme cases and reviewed on a case-by case basis by the association prior to approval. If during an emergency only one (1) member of the association can be contacted, then that member will have the authority to grant or deny permission to conduct the net.
- G. During an emergency event control operators will by verbal announcement and/or voice macro give frequent announcements informing users that there is an emergency event taking place, and to limit operation giving priority to legitimate emergency traffic. Once the emergency event has cleared a control operator shall make an announcement by voice and/or voice macro informing users that the emergency event has cleared, and the repeater is returned to normal operation.
- H. In the event of a smaller scale local emergency where the safety of human life is of concern the individual responding, in conjunction with those providing assistance, will have priority use of the repeater system. This does not grant cart blanche authorization to conduct a directed net, it merely gives those responding priority use of the repeater system while passing emergency traffic. Once the emergency has concluded those individuals taking part in responding to the emergency will relinquish control of the repeater and return the system to normal operation by announcing said same over the repeater system.
- I. At no time will any militia groups, and/or groups otherwise representing antigovernment and/or racist sentiments within the fundamental ideologies of their organization(s) be permitted access to the analog repeater system under any circumstance whether real or implied. If individuals representing any such organization(s) are identified on the system, they shall be informed that the association and the regular users of the system do not cater to their ideologies therefore it is not available for use by their organization. After having made contact and informed said individual(s) of those policies pertaining to such ideologies

they shall be directed to clear their station(s) from the system immediately. If said individuals refuse to vacate the system as directed, control operators shall block the offending station, and/or remotely disable repeater operation thereby taking it off the air until such time it is determined that said individuals are no longer attempting to access the system.

- J. Presently there is no accommodation for LiTZ (Long Term Zero) on any of the analog repeaters. Since the controller used with the analog repeaters is capable of responding to a LiTZ this may or may not be explored at a later date for deployment within the analog repeater system.

Summary:

It is strongly felt by the membership of the Weston Mountain Digital Radio Association (WMDRA) that all of us within the Amateur Radio community must step up to the task as skilled communicators in times of emergency in order to best serve our community. Our local, state, and federal authorities will be depending upon the valuable communications resources the Amateur Radio community as a whole will be able to provide in the way of capable communications systems and highly skilled operators. In order to fulfill this responsibility, we as communications specialists must function as part of a communications team combining our individual strengths for a single purpose, the safe wellbeing of our local community. The primary purpose of this document is to provide clear and detailed guidelines with regards to the response by the WMDRA to a natural or manmade disaster. This, by the establishment and clarification of system availability and access by outside organizations, operating procedures, and responsibilities during an emergency to be observed by all stations while utilizing the W7NEO repeater system. In addition, it makes clear our system capabilities, and level of availability to local, state, and federal responders in conjunction with our core values as they relate to emergency communication response in general.



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