

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of: \_\_\_\_\_ :  
Review of the Emergency Alert System : EB Docket No. 04-296  
: FCC 04-189  
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**Comments of Seven Ranges Radio Co, Inc.**

1. This proceeding has nothing to do with improving our nationwide alert system. This proceeding has everything to do with the F.C.C. amassing more power, and more money, by establishing itself as the Czar of emergency communications.

2. Only a small amount of money is needed to build an effective nationwide emergency alert system. The place to start is not by hiring more bureaucrats for the FCC. Instead, upgrade National Weather Service radio. NOAA already has regional meteorological offices staffed 24/7. We need to add to that staff trained broadcast professionals to supplement the automatic computer-generated voices on that service. More to the point, we need to upgrade the transmission facilities of NWS radio to better reach the American public.

3. The NWS radio system needs three crucial technical upgrades:

- \* Satellite delivery of programming to all transmitters, with enough capacity to allow several different data streams from each regional office;
- \* The creation of a new transmitter network operating in the FM Broadcast band;
- \* The use of the RBDS codes and protocols on these broadcast band transmitters. Already in common use in other parts of the world, these codes allow for automatic activation and automatic tuning of home and mobile radios during emergency broadcasts.

4. What we do not need to do is what the Commission proposes to do here. EAS was not activated on 9/11. Why? Because it was not needed. Indeed, that tragedy demonstrated that the present EAS system is a solution looking for a problem. Hence this proceeding, as the FCC's EAS establishment tries to justify their continued existence.

5. **Improvements to NWS Radio.** The present NWS radio system evolved from scattered transmitters operating near the VHF marine band. The system was designed to provide weather information to small boaters. Nationwide, NWS operates on just seven adjacent frequencies, using narrow-band FM transmitters. Most of these stations are low-power. The allocation of these transmitters represents a very imperfect compromise between rural and urban coverage. Often adjacent or co-channel transmitters cancel each other out with destructive interference.

6. Most NWS regional offices connect to their remote transmitters by unequalized voice-grade lines. The broadcasts are aired in robotic computer generated voices. The combination of these computer-generated voices and narrow-band VHF transmitters produce a poor quality message. Add in the signal problems, and it is no wonder that the general public makes little use of NWS radio.

7. Many broadcast stations no longer use NWS radio in their EAS systems. Poor audio quality and difficult reception is but part of a larger problem. Depending upon the regional office, the weather service too often cries wolf. The two FM stations owned by Seven Ranges straddle areas covered by the Charleston and Pittsburgh NWS offices. It seems as though Pittsburgh sends out severe thunderstorm alerts every time there is a dark cloud in the sky. Both Charleston and Pittsburgh are notorious for issuing flash flood warnings for forty-nine counties

across this region; listing every county in the emergency message; then concluding with an oration we all now know by heart about not driving through flooded roads. If the EAS decoder has not already cut-off their message for exceeding the built-in 2 minute limit. More annoying, Pittsburgh will seize our program line and generate warnings consisting of header tones, 1 kc. tone, and an EOM. No voice message. This certainly conveys a considerable amount of information to our audience. Sometimes when fronts are moving through there will be one emergency message interrupted by another, resulting in a garbled mess.

8. Hence stations disconnect NWS from their EAS decoders. The Commission reaction is typical: Shoot the messenger. Force stations to carry all NWS messages, or face the threat of a confiscatory fine. Instead of fixing the problem, the Commission proposes to compound the problem.

9. **Public All-Hazards Radio Service.** Hence our proposals. The Commission notes that some NWS offices now rebroadcast emergency messages from other emergency managers. The Charleston, WV office of NWS, for example, carries messages from West Virginia and Kentucky emergency managers, including AMBER alerts. Staffed around the clock, this is an appropriate use of the NWS regional offices to create an all-hazards warning system. However, these additional duties has not meant additional funding. During weather emergencies, the staff meteorologists have other priorities more pressing than the care and feeding of NWS radio. Which explains the garbled messages that plague broadcasters.

10. Hence our proposal that funds from the Department of Homeland Security be used to add extra staff for these national Weather Service offices. Not to create another layer of bureaucracy at the FCC. The role of this additional staff would be to coordinate and supervise

the emergency alerts carried on NWS radio. Including sending live announcements when appropriate. These staff members do not need a scientific background, indeed, journalism training may be more helpful, for they would serve as program directors for the NWS radio stations, insuring emergency announcements are timely and accurate. With consolidation in the broadcast industry, there is a large pool of trained announcers in the workforce who can fill this role.

11. To assist the additional staff and increase the effectiveness of NWS radio, funds should also be allocated for technical improvements. This system is of little use unless it is available to the public full time. From the beginning it must be realized that not all emergencies are created equal. If one is on a golf course, or out on the water in a small boat, a severe thunderstorm watch is important news. Not so for listeners in an office building, unless they forget their umbrellas. A frost warning prompts action by orange groves and tomato growers. It is not information critical to public safety. Requiring every radio and TV station to interrupt programing for such announcements deadens the impact of more serious warnings. Such constant interruptions will drive more listeners to listen to CD s, I-Pods, and satellite subscription radio. Which defeats the purpose of a system designed to alert the public to real emergencies.

12. Hence our suggestion to create a national network of NWS stations on the FM broadcast band. In translator matters, the Commission already has abandoned any interference protections provided to broadcast stations by rule. Recent Commission rulings allow the loophole of Sec. 74.1204(d) to swallow the interference protection rule at Sec. 74.1204 (b). Congress is proposing to allow LPFM stations on third adjacent frequencies. Rather than create

several thousand superfluous transmitters spewing forth religious propaganda, a better use of the broadcast spectrum is to create a Public All-hazards Warning System radio on the FM broadcast band. If the Commission proposes to repeal the laws of physics it might as well be for a good cause.

13. We would also note that most car radios tune to 87.7 and 87.9 MHz., near the sound carrier of Channel 6 TV stations. These frequencies would be available as well in areas lacking a local Channel 6 television channel. Finally, this All-Hazards Radio Service should be a primary service, allowing these new transmitters to displace existing translators. Between channels now occupied by translators, these adjacent band channels, and third-adjacent channels, enough spectrum could be carved out to establish a nationwide network of NWS stations in the FM broadcast band. In addition, in congested areas of the east coast, leaky-cable systems could be installed along major highways, and in tunnels.

14. These stations need not be identical to an FM broadcast station. Frequency response could be limited to 5 kilohertz, with only modest pre-emphasis, perhaps 50 micro-seconds, as used in other parts of the world. When built on adjacent channels, this would reduce the impact on other broadcast stations. Even with these limitations this will mean a dramatic increase in both audio quality and coverage for NWS radio. Allowing NWS transmitters in the FM Broadcast band also permits the use of an RBDS subcarrier for alert signaling to mobile and home radios.

15. Many European public and private radio services operate networks of low powered transmitters, all carrying the same programming. Radio Data System-equipped radios in Europe are designed to automatically re-tune to the strongest signal carrying a particular service by

searching for that service's special RDS code on a subcarrier. As travelers leave the coverage area of one transmitter, RDS-equipped radios search for and lock on to the signal of other relay stations carrying that same service.

16. Radio Broadcast Data Systems (RBDS) is the North American version of RDS. RBDS adds different codes, but retains the same basic code set as the European RDS, including the capability of designing radios to auto-seek same service stations, as well as respond to emergency broadcasts. Even with only low-powered stations on the FM band, with RBDS equipped car radios, mobile listeners could set their radios to automatically switch to the strongest NWS FM Broadcast station as they travel.

17. More importantly, RDS-equipped mobile radios can detect other codes to automatically re-tune radios to emergency broadcasts. The RDS protocol can even automatically switch some car radios from a cassette or CD back to this emergency broadcast. Such protocols are in use today to alert motorists to emergencies along major European highways, using either leaky-cable schemes or highly-directional low-power FM stations.

18. Hence, by creating a national system of all-hazard warning stations in the FM broadcast band, the weather service and other emergency managers can have direct access to RBDS equipped car radio receivers. If the demand develops, the same systems can be built into table radios. The listeners can then choose to listen, or not, to the regular broadcasts of these stations. Hazard and emergency information can be broadcast without the need to commandeer broadcast station facilities. There is no need, then, to mandate broadcast stations carry each and every emergency transmission. Broadcasters can return to the role of editor, selecting for

immediate relay only those alerts of imminent threat to life and property; while carrying other watches and warnings as part of regularly scheduled news and weather bulletins.

19. As can be seen, the role of the FCC is limited with such a system. The Commission must establish this PAWS service, setting transmission standards, and locating suitable channels nationwide. Once established, there is no need for a standing emergency alert office except to monitor new decoder equipment for compliance with established standards, and help the regional NWS offices coordinate with local emergency managers. Of course, this will mean that Enforcement Bureau Chief David Solomon will have to seek a new class of victims in order to maintain the Enforcement Bureau's revenues from year to year.

20. **Other Proposals.** The Commission threw out quite a number of proposals in this proceeding. Some are interesting, a few useful, some are just bizarre. We will comment on these proposals in the order in which they appear in the *Notice*.

21. **Federal/State Program Responsibility.** Nothing was ever improved by Federal supervision. Legislation may be needed to create the PAWS radio service on the broadcast band, Commission action to establish the regulatory framework and allot frequencies. FEMA, DHS and NOAA coordination is to be encouraged. NOAA, for example, already has experience coordinating with FEMA and DHS in providing meteorological information for the two national political conventions this summer. NOAA has several teams, equipped with portable equipment, that can be airlifted into emergency sites. Presently, they provide aid and advice at the site of major forest fires, and other such natural disasters. These teams have the training to help out as well in the event of NBC terrorist events (Nuclear, Biological, Chemical not a visit from Tom Brokaw).

22. This is not an area for the FCC. The lead agency should be FEMA, or FEMA and NWS. NWS already overlaps state boundaries, reaching natural geographic areas. State plans are fine, so long as broadcaster compliance with the plans is not mandatory. Our signal straddles state lines, it makes more sense to have NOAA and FEMA coordinate with local emergency managers than to create another layer of bureaucracy at the state level. Give NWS their own means of reaching the public. Don't abuse the system by commandeering the resources of broadcasters.

23. **Mandatory Alerts:** The obvious question is what alerts would become mandatory? Mandating carriage of NWS would result in reduction of coverage, not an increase. For example, our EAS decoder is set-up to respond to priority alerts directed at any one of 9 counties in our coverage area. Mandate carriage of all alerts, and our equipment goes back to the manufacturer to be reprogrammed to only respond to our two counties of license. Mandating carriage of too many non-critical alerts, and the public will ignore the warning system. Remember the story of the shepherd boy who cried "wolf" once too often? The wolf had him for lunch.

24. **Local emergency managers.** Once the PAWS radio system is established, protocols could be developed to allow local emergency managers to access the system. If there is a local PAWS transmitter, standard EAS encoder/decoder equipment could be used with in conjunction with a local radio link or wire-line connection to this transmitter from the local emergency operations center. Broadcasters could then monitor this local PAWS station for both local and regional alerts, to be relayed at their option.

25. Most locally-owned broadcasters have good relations with the police, fire, EMS and other emergency providers. The EAS system is not specifically needed for these services to

access locally-owned stations. Certainly there have been exceptions, but perhaps the Congress may want to re-visit the 1996 telecom act to revise ownership limits, instead of creating new burdens for those stations that are providing local services. This is not an area for the Commission to muck up with more unnecessary rules and record keeping requirements. This area should be left to these state and local emergency managers, FEMA and NWS, to hash out.

26. Uniform national guidelines are not needed, and serve no purpose except continued employment of the guideline writers. Each state, and each locality has different structures for the emergency services. In some states, the Sheriffs are tax collectors, in other states, there is a state-wide police organization. Again, local plans are best established by NOAA, FEMA and the local agencies involved.

27. **Alerts by Broadcasters:** A few weeks ago (September 18 and 19, 2004), we had a 40 year flood in the Ohio Valley . Our only staff member scheduled in that afternoon had to leave in order to evacuate his own home from the rising waters. Leaving the author to try to remember what did what on the audio console. Working with our colleagues at the local news and information station, (WMOA, Marietta) we aired a series of reports Saturday afternoon, when the river was rising rapidly. We did not once activate our EAS decoder. For one thing, it was 50 miles away at the manufacturer, sidelined with some kind of software problem that caused it to lock up. Our stations are not designated either primary sources or primary relays, so it is likely that there are no decoders keyed to our signal. Nor does the elaborate encoding signal mean anything to 99% of the audience.

28. The Commission's suggestion that broadcast stations consult local emergency managers before initiating an alert is a non-starter. As our example above explains, unless there are decoders monitoring that particular station, there is no need for the so-called alerting tones. For managers of local primary or local relay stations, there is a value in using the tones to alert those other stations in the market of regional emergencies. With an FM band PAWS system, or even with the present system of VHF all hazard transmitters, primary alerts can be relayed from emergency coordinators directly to monitoring stations. However, the broadcast primary relay stations provide redundancy to this system.

29. Chemical plants dot the Ohio Valley. We have three plants in our small county. Our stations run unattended overnight, and much of the weekend. We were live until a year ago, but as the only independent FM in a market with one group of 5 stations, and another group of 7, reality caught up with us. Our general manager, however, lives just five minutes away from the studio during the week. Suppose a local chemical plant manager called him at 2 in the morning to alert him of a release of a toxic gas, such as chlorine? Should he spend his time trying to reach the local emergency coordinator, or should he rush up to the station to alert anyone up at that hour?

30. **EAS Structure and Codes.** Distribution of National Alerts 9/11 proved that the system is unnecessary. As the Commission noted in its preamble, this system evolved from the earlier Conelrad system. Perhaps in the 50's we needed AM stations to tune to 1240 or 640 to confuse the RDF systems in Tupolev-95 Bear bombers. Now many cars have GPS systems accurate to within a few feet. The EAS system serves no national security purpose. The old

daisy-chain system for national alerts should be abandoned. It is a cold-war relic like Congress's bunker at the Greenbrier.

31. These EAS encoders/decoders are not built all that well, and are overly complex to begin with. Hence natural attrition will result in the spread of new codes. Of course, if the NWS FM band PAWS system is implemented, then there is no need to maintain the older system. The Commission's role is then to insist that radio manufacturers, if they build-in EAS decoders, conform to this present code system.

32. **Expanding EAS to other services.** Broadcast HDTV services will be primarily delivered by cable companies, not over the air. Hence, EAS carriage into these channels will be a cable system problem. As some of the comments already filed indicate, these alerts can be viewed as a nuisance by viewers if overused. Many cable services use fiber to relay programming from metro areas to rural systems, hence the local alerts received at what passes for a headend nowadays may show up on sets a hundred miles away.

33. DBS/TV provides local tv to some markets, hence alerts would be relayed by these systems through those local TV stations. For other areas, it is difficult to see how EAS alerts could be conveyed over DBS. DARS, i.e., XM and Sirius, would love to have an excuse to get into local radio broadcasting by the back door of emergency messaging. After all, Clear Channel owns a chunk of XM, as well as a traffic reporting service. First EAS on terrestrial repeaters and local channels of the satellite service, then local traffic, then local spots. Better to build an FM band PAWS system, then require the use of RBDS alerting and an on-board FM tuner to alert satellite listeners.

34. **Alternate Warning Mechanisms.** It is one thing to voluntarily allow other services to use EAS alerting to reach their subscribers. It is an invitation to further disaster to mandate such services carry EAS warnings. Many volunteer fire departments use paging transmitters and auto-dialing phone systems to alert their members to a fire or emergency event. Similar systems are used by hospitals and public utilities to call in their crews in the event of emergencies. In this day and age, auto-dialers often reach the cell phones, not land lines, of emergency responders. Proposing to require these services to tie into the EAS system invites disaster.

35. Imagine that a line of thunderstorms is moving towards an area, and the winds of this approaching system blows power lines onto a school, starting a fire. A call to the 911 dispatchers, they send out an alert for the local volunteer fire department members. But the pagers and the local cell phone system is all tied up-- running severe thunderstorm warnings from NWS. It may be somewhat important to have the public aware of these approaching storms, and the potential for serious injury and property damage. But tying up paging and cell systems for these emergency alerts creates more than a potential for disaster if emergency responders can't be reached directly.

36. Again, what is an emergency? Agricultural interests may desire immediate alerts of frost warnings or high wind warnings on their VSAT terminals. Many of these subscription services already provide for such notices. Stockbrokers may not care, unless they routinely trade in orange juice futures.

37. **Public Warnings for Disabled and non-English speakers.** The proposal suggests that English language broadcast stations operating in areas with numbers of non-English speakers

be required to run alerts in that second language. The logic escapes me. Presumably if the audience doesn't understand English, they wouldn't be tuned to an English language station.

38. Who is to do the translations? The stations? It makes no sense to mandate all broadcasters to translate emergency warnings in a second, regional language. Most stations have neither the staff, nor financial ability to translate such announcements. The Commissioners, as non-broadcasters, should remember that broadcasting is an advertising supported medium. Our advertisers don't really need us, there are plenty of advertising agencies preaching the mantra of newspaper and direct mail. Unlike the regulated industries, Broadcasters can't just raise rates to cover new Federally mandated costs. Given the inventiveness of public-interest lawyers, such a mandate may also be construed as a new entitlement. Alerts in Hmong in Minneapolis? In Hopi or Navaho for Arizona? Canada has gone down this road with dangerous results: witness the language police who harassed Anglophones in Montreal before they were reigned in.

39. Since even foreign language stations are likely to be automated, emergency alerts will be automatically relayed.. Obviously, mandatory carriage of NWS emergency messages, in English, serves no purpose on these foreign-language stations where their audience speaks little English. Again, as we suggest above, DHS funds are best directed to helping NWS expand its radio system. For the Mexican border states, and South Florida, would it not make more sense for NWS to add weather broadcasts and alerts in Spanish on separate transmitters? No need to hire bi-lingual meteorologists, simply bilingual announcers for these NWS stations.

40. **Security.** I remember the ten-bell code rattling the UPI teletype some 34 odd years ago. I knew enough at the time to figure out that it was a screw-up someplace in Washington, not a real national alert. As indeed it was. (wrong message loaded by some Air Force guy who

was supposed to run a national test instead, believe he ended up shoveling snow off the runway in Thule for the rest of his tour of duty.). The best security is in a decentralized system. Not in bringing back the red envelopes.

41. **Location of EAS equipment.** With an independent NWS system using the FM broadcast band, this is of lesser importance. Biggest problem area remains the cable systems, especially those systems that insist on blanking out all channels to run some vanilla severe weather alert from NWS on a common alert channel. While the local TV station (now blanked out) has the radar up & the announcer telling us where the storm actually is, and where it is really going.

42. **Testing.** Serves no particular purpose except to aggravate the local stations. As to testing the national PEP system, see Paragraph #40 above; and remember Murphy's Law. Too many tests a public nuisance? Of course. But the Commission is rapidly becoming a public nuisance anyway.

43. **Training.** Train what staff? Weekends ABC Satellite voice-tracks their satellite feeds. A computer in Dallas talking to our computer. That's why there is an automatic relay. Hence the training need be back at the entity that originates the messages. Our local primary relay is unmanned part of the time, so this means NWS. Hence our proposal that DHS funds should go to NWS for additional staff, and not into Commission coffers for empire building, and the further harassment of small business.

44. **Small Operators.** Well, if FEMA wants to put in a three phase generator for us, that might be useful. Otherwise, it's a case of a 100% increase in costs, and 10% kicked-back in aid. If that.

45. **Enforcement.** Aren't you being just a bit greedy? \$32K is a good month of sales. As we stated at the head of our comments, this is the typical reaction of government bureaucrats. Our system is perfect, if it doesn't work, it must be because those evil people outside of Washington are trying to defy us. We must punish them into compliance.

46. The bigger the fines, the smaller the chance that any of us broadcasters will go the extra inch, let alone the extra mile, to try to make the EAS system work. I have already concluded that the Enforcement Bureau is less interested in enforcement than in extortion. This proceeding, along with the companion proceedings proposing mandatory program recording and more localism requirements, convince me that the FCC does not want small, local broadcasters to survive. They would rather deal with the large groups that can keep their friends in the legal community employed, and key Congressmen happy. We have in this proceeding proposals for mandatory EAS warnings to disrupt our programming. We already have regressive regulatory fees, as well as filing fees for every minor change we need to make.<sup>1</sup> Mandatory program recording will mean more computer equipment to constantly maintain. The localism proceeding will result in more paperwork to compile for a public file no-one gives a damn about.

47. You folks note that only around 31 percent of the TV set owners watch local TV. Radio gets maybe an hour and a half a day. Yet you propose more ways to annoy this remaining audience with silly tests, and a plethora of meaningless alerts, all mandatory. Then you will wonder why no-one pays any attention to the important alerts.

48. **Conclusion.** Saturday, September 18<sup>th</sup> After completing my grocery shopping in Marietta, I started down 7<sup>th</sup> street to Ohio Route 7, only to find my path blocked by the rapidly

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<sup>1</sup>\$800 to move our FM antenna four feet from our old tower to the new.

rising Ohio River. Which was obviously well above the level predicted Friday night before by NWS: a foot *below* flood stage. My reaction was to cut over on the back roads and head up to the radio station rather than back home, to get some information on about the flooding.

49. Most broadcasters will try to do alert the public, when the situation warrants it. There are countless minor emergencies of importance to a few people. These merit some radio coverage, but not Chicken Little clucking at the public from every corner. Rather than create another layer of bureaucracy to prop up the present, failed, system; rather than threaten broadcasters with draconian fines; the Commission should stop beating the dead horse of EAS.

50. Instead, Federal money, and Federal efforts should go to NOAA. Towards creating a public all-hazards warning service on the FM band, using established technology to directly alert the public to imminent hazards, and to provide a reliable outlet for more routine alerts and messages.

Respectfully submitted by:

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