

LOW POWER RADIO: TECHNICALLY SOUND AND VASTLY POPULAR



The National Association of Broadcasters ("NAB") has led a scare campaign against low power radio. On January 20, 2000, after a year of intensive analysis, the Federal Communications Commission created a new low power radio service. The House Subcommittee on Telecommunications, Trade, and Consumer Protection recently held a hearing addressing the technical aspects of the FCC's low power radio service. Significant misinformation is being delivered to members of Congress and the public by opponents to low power radio. This information sheet addresses technical and other issues.

Media Access Project ("MAP") has advised a wide-ranging group of churches, community groups, schools, artists, and others who fervently support low power radio. A partial list of those supporters is also attached.

The NAB is wrong that low power radio will harm current broadcasts. At worst, for 100 watt stations, **less than 1.6 percent** of the people receiving a new low power radio station will experience any difficulty hearing a current station. With 1-100 watt stations, **for every 64 to 680 listeners served, only one listener may experience interference.** Many of these listeners will be able to adjust their radios by moving or rotating them, and will continue to receive the current stations *in addition* to the new low power station. These numbers apply only under worst-case conditions— when the listener experiencing interference has an inexpensive radio and is satisfied with only one or two full-power stations. In other situations, the numbers of people experiencing interference are much lower.

The NAB's audio simulation of the impact of low power radio is not accurate. No FM radio signal would ever sound like the NAB's simulation. This simulation was produced on a computer, and did not use real radio signals. The NAB never presented the simulation for analysis by other engineers — it was not submitted as part of the public FCC record. When the simulation was played in public for the first time at the Subcommittee hearing, the validity of this simulation was strongly criticized by other engineers present. In reality, radio signals experience the "capture effect." Interference between two stations would never produce the sounds on the NAB's simulation.

Under the NAB's analysis, radios today do not work. As demonstrated before the FCC, many radios cannot meet the reception standards proposed by the NAB. Thus, **defying common sense**, the NAB alleges that most consumers are not satisfied with the radios they own today. The only way the NAB could attack low power radio was to create standards that are impossible for most ordinary radios to meet. In other words, **the NAB opposes low power radio because small clock radios do not sound like expensive high fidelity sound systems**, something no consumer would expect.

The NAB incorrectly claims that low power radio will harm radio's transition to digital radio. The two companies performing research and development on digital radio, Lucent Digital Radio and USADR, stated in the FCC's official proceeding that they had **no objection** if the FCC removed "third adjacent" protection. This is exactly what the FCC did.

The NAB's technical analysis before the FCC was not sound. As part of the FCC proceeding, MAP hired an expert engineer to review the information submitted by the NAB and others. This analysis showed that the NAB's studies were invalid. The experts the NAB hired to refute MAP's study could find **nothing** wrong with its analysis. The NAB resorted to accusing MAP's expert of "bias" because he recommended the FCC move ahead on low power radio.

The protection standards favored by the NAB could not be applied to current radio stations. If the FCC were to apply the level of protection favored by the NAB to all radio stations, some radio stations would be taken off the air. The NAB cannot justify why a more restrictive level of protection is not acceptable for its members, but should be imposed on new stations.

The NAB falsely alleges that the FCC did not fully consider the technical issues. The FCC conducted an extensive proceeding. The FCC conducted its own technical studies. It delayed the proceeding by more than seven months to accommodate additional technical submissions by the broadcast industry. Some more responsible broadcasters focused their concerns on the areas that were accommodated by the FCC. The FCC significantly scaled back its original proposal when adopting its final decision. The technical submissions in support of low power radio would have justified an even greater change in technical standards than ultimately adopted by the FCC.

Radio Reading Service signals are protected. Signals for radio reading services, also known as reading for the blind, are transmitted *within* the full-power signal that the FCC protected. Full-power broadcasters that transmit radio reading services have the same recourse presently available to combat interference with these signals.

Existing transmitters are protected. Translators that provide small towns with access to a national service, such as National Public Radio, will not be moved or eliminated because of low power radio.

Small-market commercial broadcasters are not jeopardized. The low power service is completely non-commercial. It will not dilute the commercial advertising market. Existing commercial stations *may* feel the prick of competition to provide more innovative programming.

The NAB argument that low power radio will add new "interference" to the airwaves is a red herring. If this argument were sufficient, communications technology must be frozen in time. Any new service, including cellular telephones, digital radio and television, and new hand-held wireless devices add more signals to our airwaves. The right question is how to maximize a scarce resource — the spectrum — to provide *more* services and sources of information to the American people. In every area of communications policy, the FCC has been prodded by Congress to increase competition, provide avenues for new entrants, and maximize the number of uses for our valuable spectrum. The FCC's low power radio service does just that.

The NAB considers any spectrum that is not controlled by its members to be a threat, and thus seeks to kill this service. Do not be fooled by hearing only one side of the story. The groups who support low power radio cannot match the immense resources of the broadcast industry, but they are numerous and spread all over the country.

A list of individuals and groups that support low power radio is attached. Many additional individuals and local organizations filed in support of low power radio at the FCC. These statements of support are available in the FCC's public record. If you require any further information, please do not hesitate to contact Media Access Project at (202) 232-4300. For additional information on Media Access Project and low power radio, see our web site at: www.mediaaccess.org.

Media Access Project is a twenty-seven year old non-profit, public interest, telecommunications law firm that represents the public before the Federal Communications Commission and in the courts.