



MEMORANDUM

To: Members, Subcommittee on Innovation, Data, and Commerce
From: Majority Staff
Re: Innovation, Data, and Commerce Subcommittee Hearing

I. INTRODUCTION

On Tuesday, April 30, 2024, at 10:30 a.m. (ET), the Subcommittee on Innovation, Data, and Commerce will hold a legislative hearing in 2322 Rayburn House Office Building titled “Preserving Americans’ Access to AM Radio.”

II. WITNESSES

- Mr. John Bozzella, President and CEO, Alliance for Automotive Innovation
- Mr. Gary Shapiro, CEO, Consumer Technology Association
- Ms. Melody Spann-Cooper, Chair and CEO, Midway Broadcasting Corporation
- Mr. Justin Ahasteen, Executive Director, Navajo Nation

III. BACKGROUND

Amplitude modulation (AM) radio serves as the backbone of the nation’s emergency communications infrastructure and plays a vital role in the Emergency Alert System (EAS). According to Nielson data, AM radio has more than 45 million listeners each month, who rely on it for local news, information, sports, and weather updates.¹ Most importantly, AM radio is an essential platform for public safety officials, including the President and Governors, to communicate directly with the public during national emergencies.

Last year, numerous automakers removed, or announced plans to remove, broadcast AM radio receivers from electric vehicles (EVs) due to electromagnetic interference generated from electric batteries.² The primary source of interference is often the high-voltage electrical components used in electric propulsion systems, such as the motor, inverters, and charging systems. These components can generate static, noise, and a high-frequency hum that can interfere with the reception of AM radio signals.³

To mitigate interference, some automakers have been working to improve the design of EV components to minimize electromagnetic interference, including shielding and filtering techniques. Other automakers have decided to remove AM radio receivers from their electric

¹ <https://radioinsight.com/headlines/253927/nielsen-releases-audio-today-2023-report/>

² <https://www.freep.com/story/money/cars/2023/04/01/ford-am-radio-commercial/70062845007/>

³ <https://letter.ly/am-vs-fm-radio/>

vehicles. According to letter responses to Representatives Bob Latta (R-OH) and Greg Pence (R-IN) and public reporting, seven companies — BMW, Mazda, Polestar, Rivian, Tesla, Volkswagen, and Volvo — have removed analog AM radio from their electric vehicles.⁴

In April, Ford Motor Co. announced it would not include AM radio in any of its new models beginning in 2024.⁵ However, on May 23, “after speaking with policy leaders about the importance of AM broadcast radio as a part of the emergency alert system” Ford reversed its decision and will include it on all 2024 Ford and Lincoln vehicles.⁶

IV. H.R. _____, the AM Radio for Every Vehicle Act of 2023

This bill would require the Department of Transportation (DOT) to issue a rule that requires all new motor vehicles to have devices that can access, receive signals, and play content transmitted by AM broadcast stations or digital audio AM broadcast stations installed as standard equipment. Prior to the effective date of the rule, manufacturers that do not include devices that can access AM broadcast stations as standard equipment would be required to inform purchasers of this fact through clear and conspicuous labeling. DOT would be able to assess civil penalties against any manufacturer that fails to comply with the mandate. The Department of Justice could also bring a civil action to enjoin a violation. Further, the Government Accountability Office (GAO) would be required to study and report on whether a reliable alternative communication system exists for delivering emergency alerts and consider the (1) cost to drivers and passengers of receiving communications through an alternative system, and (2) cost and time required to develop and implement an alternative.

V. BACKGROUND ON THE NATIONAL PUBLIC WARNING SYSTEM

The Integrated Public Alert & Warning System

The Integrated Public Alert and Warning System (IPAWS) is the Federal Emergency Management Agency (FEMA) national system for local alerting that provides authenticated emergency and life-saving information to the public through radio and television via the EAS, to mobile phones using Wireless Emergency Alerts (WEAs), and on the National Oceanic and Atmospheric Administration’s (NOAA) Weather Radio.⁷

Emergency Alert System

The EAS is a national public warning system commonly used by state and local authorities to deliver important emergency information, such as weather and AMBER alerts, to affected communities over television and radio.⁸ This system’s principal purpose is also to provide the President of the United States with the capability to address the American people

⁴ <https://www.markey.senate.gov/news/press-releases/senator-markey-criticizes-eight-automakers-for-removing-broadcast-am-radio-from-vehicles>

⁵ *Id* at 2.

⁶ <https://twitter.com/jimfarley98/status/1661024295110463491>

⁷ https://www.fema.gov/sites/default/files/documents/fema_ipaws-process-playbook-version-1.0_20210120.pdf

⁸ <https://www.fcc.gov/emergency-alert-system>

within 10 minutes during a national emergency.⁹ Broadcast, cable, and satellite operators are the stewards of this public service in close partnership with state, local, tribal, and territorial authorities.¹⁰

FEMA, in partnership with the Federal Communications Commission (FCC) and NOAA, is responsible for implementing, maintaining, and operating the EAS at the federal level. Most EAS alerts originate from the National Weather Service (NWS) in response to severe weather events, but an increasing number of state, local, territorial, and tribal authorities also send alerts. In addition, the NOAA Weather Radio All Hazards network, the only federally sponsored radio transmission of warning information to the public, is part of the EAS.¹¹

Wireless Emergency Alerts

Wireless Emergency Alerts (WEAs) are short emergency messages from authorized federal, state, local, tribal, and territorial public alerting authorities that can be broadcast from cell towers to any WEA-enabled mobile device in a locally targeted area. Wireless providers primarily use cell broadcast technology for WEA message delivery. WEAs can be sent to mobile devices when someone may be in harm's way, without the need to download an app or subscribe to a service. WEAs are short messages that warn the public of an impending natural or human-made disaster.¹²

VI. AM RADIO

Public Safety

Nearly 80 AM radio stations play a crucial role serving as Primary Entry Points (PEPs) across the country.¹³ PEPs are designated radio stations whose signals cover 90 percent of the American population and have a direct connection to FEMA and the NWS. In times of crisis, these stations receive emergency information and alerts directly from the federal government, ensuring a reliable and authoritative source of information for the public.¹⁴ These stations are equipped with backup communications equipment and generators that allow them to continue broadcasting information to the public during and after an emergency.¹⁵

Once a designated PEP station receives an emergency alert, it broadcasts the message from one station to another. This allows the emergency alert to reach a wide audience, covering both urban and rural areas, in a short amount of time.¹⁶ This system provides built-in redundancies, as multiple AM radio stations within the same area can receive and relay the same

⁹ <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public/emergency-alert-system>

¹⁰ *Id.*

¹¹ *Id.*

¹² <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public/wireless-emergency-alerts>.

¹³ <https://www.wearebroadcasters.com/dependonam/ameas.asp>

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id at 18.*

emergency information. This ensures that even if one station is compromised or offline, the message can still be disseminated through other stations, providing a resilient system to keep communities informed during emergencies.

AM radio stations continue to function during power outages, natural disasters, or other emergencies, providing critical updates and information to the public. WEA may not be as reliable in these situations, as cell towers can be damaged or overwhelmed by high call volumes.¹⁷

Local Broadcasting

Today, there are nearly 4,500 AM radio stations nationwide.¹⁸ From investigative reports to breaking news and weather coverage, broadcasters keep American's informed. Nielsen reports AM radio still accounts for 20 percent of the share of terrestrial radio listening, with time spent listening to the AM dial hovering around two hours each day.¹⁹

VII. CONGRESSIONAL ACTIVITY

- On May 15, 2023, Communications and Technology Subcommittee Chair Bob Latta (R-OH) and Rep. Greg Pence (R-IN), along with 102 Members of Congress, sent a letter to several automakers expressing concern about reports that companies have removed or are planning to remove AM radio receivers from vehicles.²⁰
- On May 17, 2023, Representative Josh Gottheimer (D-NJ), along with Reps. Kean (R-NJ), Menendez (D-NJ), Westerman (R-AR) and Perez (D-WA) introduced H.R. 3413, the AM for Every Vehicle Act, which would require NHTSA to mandate AM broadcast radio in new vehicles at no additional charge.²¹ In the Senate, S. 1669 is companion legislation led by Senator Ed Markey (D-MA) and Senator Ted Cruz (R-TX).²²

VIII. KEY QUESTIONS

- What are the public safety implications for removing AM radio receivers from vehicles?
- What impact will the removal of AM radios from automobiles have on the reach and accessibility of AM radio stations in local communities?

¹⁷ *Id at 18.*

¹⁸ <https://www.forbes.com/sites/bradadgate/2023/04/14/with-am-radio-no-longer-available-in-some-evs-carmakers-are-facing-a-backlash/?sh=275a3d9b1a26>

¹⁹ *Id.*

²⁰ <https://drive.google.com/file/d/13hXwlp0tgOmj8nCMrOxtPLvEM3mRVT4l/view>

²¹ <https://www.congress.gov/bill/118th-congress/house-bill/3413/text>

²² https://www.markey.senate.gov/imo/media/doc/am_radio_for_every_vehicle_actpdf.pdf

- What technology is available that can address signal interference from EVs to the AM radio receivers?

IX. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Brannon Rains and Michael Cameron of the Committee Staff at (202) 225-3641.