

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of:)	
)	
Response Efforts Undertaken During 2017)	PS Docket No. 17-344
Hurricane Season)	
)	

**COMMENTS OF
NATIONAL PUBLIC RADIO, INC.**

Introduction and Summary

National Public Radio, Inc. (NPR) hereby submits its comments on behalf of the public radio system in response to the Public Notice in the above-captioned proceeding.¹ The public radio system, a uniquely American, non-commercial, media enterprise, includes more than 1,000 stations including in every state capitol and hundreds of American communities, large and small, urban and rural. Producers and distributors of public radio programming, including American Public Media (APM), Public Radio International (PRI), and NPR, are united by a commitment to the highest standards of journalist ethics. Every minute of every program broadcast to some 42 million Americans weekly is routed through the Public Radio Satellite System (PRSS), a distribution utility owned by the public radio system.

Public radio stations broadcast in remote regions of the country as well as in areas that have recently experienced natural disasters. Recognizing how important it is to provide news and emergency alerts in these circumstances, public radio has worked hard to create a distribution and broadcast system that is both resilient during weather emergencies and that can use the expertise and resources from across the public radio system to recover quickly. Key to

¹ *Public Safety and Homeland Security Bureau Seeks Comment on Response Efforts Undertaken during 2017 Hurricane Season*, Public Notice, DA 17-1180 (Public Safety and Homeland Security Bureau, Dec. 7, 2017), 2017 FCC LEXIS 3860.

this resilience is the PRSS, which is managed and operated by NPR. The PRSS's satellite downlinks allow public radio stations to receive and broadcast news coverage and emergency information even when other communications networks are down. The PRSS operates in mid-band frequencies currently under review by the Commission,² and NPR urges the Commission to consider the important role that public radio and the PRSS play during natural disasters like the 2017 hurricane season as it considers potential changes to the allocation of these frequencies. Public radio stations' current full-band, full-arc licensing of C-band spectrum is one of the reasons for their resilience, as it allows them to maintain continuous service through interference on normal channels and through signal difficulties with individual satellites.³

This ability to stay on the air allows Americans to take as a given that they can turn to public radio for news and information during natural disasters. In 2013, Representative Brian Higgins summarized public radio's significance in national emergencies:

Over 98% of the American population has access to a public radio or TV signal. Whether it's remote, rural areas of our Nation or densely populated cities, public media is our go-to source for timely and accurate information often related directly from emergency management officials and first responders. As FEMA constantly reminds us, when the power grid is down have battery operated radios on hand.⁴

Likewise, in 2015, Senator Ted Cruz reiterated the importance of public radio during emergencies:

When disaster strikes, it is critical that the American people have access to real-time emergency information that can save lives. Texas understands the seriousness of these threats more than most states as it has made 90 major disaster declarations since 1953 and routinely prepares for tornadoes, floods, wildfires, and hurricanes. Public radio and

² *In the Matter of Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Notice of Inquiry (rel. Aug. 3, 2017).

³ *See In the Matter of Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Comments of NPR, (filed Oct. 2, 2017).

⁴ Representative Higgins (New York). "Emergency Information Improvement Act of 2013." Congressional Record 159: 98 July 10, 2013) p. H4369.

broadcast stations can play a significant role providing critical information during and after natural disasters and terrorist attacks.⁵

Public radio's resilience is rooted in its fundamental simplicity. The PRSS serves two critical functions for local radio stations: program distribution and emergency alerting, which they can augment with local reporting. Even when power is cut off, as has been the case in Puerto Rico following Hurricane Maria, emergency backup power and specially-designed portable kits can sustain a public radio station for extended periods of time. Although many public radio stations were hard hit during the 2017 hurricane season, they were also able to provide critical services to their communities during the storms and throughout the recovery process.

1. Resilience of the Public Radio System During the 2017 Hurricane Season

There are several reasons why public radio is uniquely resilient during storms and other emergencies:

First, the public radio system cannot be overwhelmed with traffic, as is the case with wireless phone networks. Wireless network overload is a well-recognized problem that requires an intact system and deft network engineering to alleviate.⁶ Broadcasting does not suffer from this difficulty.

Second, radio broadcasting does not rely on widespread and relatively fragile networks that connect other communications platforms to their users. Public radio stations are particularly

⁵ Press Release, Office of Senator Ted Cruz, Cruz, Palazzo Pass the Emergency Information Improvement Act (December 16, 2015) (*available at* https://www.cruz.senate.gov/?p=press_release&id=2556).

⁶ *See, e.g.*, Neal Ungerleider, *Why Your Phone Doesn't Work During Disasters—And How To Fix It*, Fast Company, April 17, 2013 (*available at* <https://www.fastcompany.com/3008458/why-your-phone-doesnt-work-during-disasters-and-how-fix-it>); Marguerite Reardon, Can we count on cell networks in disasters?, CBS News, September 7, 2011 (*available at* <https://www.cbsnews.com/news/can-we-count-on-cell-networks-in-disasters/>).

resilient because the PRSS is designed to function in rural and remote areas where landline data networks are unavailable. Public radio stations rely on a satellite dish that receives national news and other content and a transmitter to broadcast the station’s programming to its local audience. Like all physical assets, satellite dishes and transmitters are susceptible to damage in extreme weather. But unlike landline telephones, wireless networks (which use fiber backhaul), and residential Internet service, public radio stations don’t generally require access to any land-based network to provide the basic broadcast services in emergency situations. For this reason, public radio stations were able to stay operational more successfully during the 2017 hurricane season and to bounce back faster than other communications networks. Data collected by the Commission during the aftermath of Hurricane Maria bear this out. The following chart shows the percentage of each type of communications network that was reported offline during the two months following Hurricane Maria’s landfall in Puerto Rico:

Puerto Rico			
Percentage reported down or offline in FCC Status Report	September 21 ⁷	October 1 ⁸	November 14 ⁹
Cell sites	95%	89%	38%
Cable and wireline	“Large percentage”	“Large percentage”	“Majority of customers”
Broadcast TV	No data	66%	93%
Radio stations	No data	39%	39%

Public radio stations, using the PRSS, provided news coverage and emergency alerts when virtually all other communications networks were down and in places where recovery time for those networks has been measured in months, not days.

⁷ Communications Status Report for Areas Impacted by Hurricane Maria, September 21, 2017 (*available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-346840A1.pdf).

⁸ Communications Status Report for Areas Impacted by Hurricane Maria, October 1, 2017 (*available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-346989A1.pdf).

⁹ Communications Status Report for Areas Impacted by Hurricane Maria, November 14, 2017 (*available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-347753A1.pdf).

2. Preparation and Recovery Efforts during the 2017 Hurricane Season

Public radio's ability to weather the 2017 hurricane season was due to more than the physical resilience of its satellite-based distribution system. NPR's member stations, recognizing the public's reliance on radio news and alerts during natural disasters, have tested and put in place response systems that allowed them to prepare for, survive through, and recover from storms as quickly as possible.

A. Preparing for Natural Disasters

The Florida Public Radio Emergency Network (FPREN) is a good example of the preparation public radio stations have undertaken for events like the 2017 hurricane season. The FPREN is a non-profit association that was founded in 2014 by 13 Florida public radio stations and the Florida Division of Emergency Management. FPREN stations cover 99 percent of the state and are locally staffed and equipped to stay on the air during massive power outages. One of FPREN's latest innovations is the Florida Storms app, a smartphone application that has been downloaded more than 100,000 times.¹⁰ The app provides geotargeted information such as live hurricane updates, local shelter details, and evacuation routes. It also livestreams the closest Florida public radio station, a particularly valuable feature for those evacuating from one part of the state to another.¹¹ As executive director of the Division of Media Properties at the University of Florida has written, "[t]he depth and professionalism of the FPREN content provides even the smallest stations serving rural areas with major market quality presentation without stressing

¹⁰ Press Release, Corporation for Public Broadcasting, Collaboration Helps Public Media Weather the Hurricanes (November 2, 2017) (*available at* <https://www.cpb.org/spotlight/collaboration-helps-public-media-weather-hurricanes>).

¹¹ Press Release, University of Florida College of Journalism and Communications, Florida Public Radio Launches Free 'Florida Storms' Mobile Phone App (August 28, 2015) (*available at* <https://www.jou.ufl.edu/2015/08/28/florida-public-radio-launches-free-florida-storms-mobile-phone-app/>).

their already limited resources. And major market stations like the content and flexibility FPREN provides to their news and programming teams striving to lead their markets and serve those in need.”¹² The network’s preparation enabled it to provide more than 81 hours of live, continuous coverage as Hurricane Irma moved across the Florida Keys and up the Gulf Coast in mid-September.¹³

This kind of coordination extended public radio’s coverage of the hurricanes for as long and as widely as possible. When Hurricane Harvey flooded southeastern Texas in late August, Houston Public Media provided expanded coverage on its multicast channels, simulcast to KEDT-FM in Corpus Christi and provided coverage to national and international media. To do so, it relied on a partnership with KUT-FM in Austin, KERA TV/FM in Dallas, and Texas Public Radio in San Antonio to augment round-the-clock coverage statewide, while contributing to national coverage on NPR and the PBS NewsHour.

B. Focusing on Recovery

The public radio network’s ability to share emergency response resources allowed stations directly affected by the hurricanes to come back online much faster than they would otherwise have been able to. CoastAlaska, a network of public radio stations in southeastern Alaska, created a portable radio station kit in 2011 that allows its stations, many of which are in remote locations, to stay operational in emergencies. These “Radio To Go” kits fit into four cases and provide everything a broadcaster needs to set up a small radio station. When assembled, the

¹² Press Release, Corporation for Public Broadcasting, Collaboration Helps Public Media Weather the Hurricanes (November 2, 2017) (*available at* <https://www.cpb.org/spotlight/collaboration-helps-public-media-weather-hurricanes>).

¹³ *Id.*

station can broadcast with power from car batteries wired together.¹⁴ As the Corporation for Public Broadcasting reported, after Hurricane Maria hit Puerto Rico, public radio stations worked tirelessly and together to get WIPR-FM and WRTU/WRUO-FM back on the air: “CPB and the Latino Public Radio Consortium worked together in the hurricane’s aftermath to assess the situation and coordinate support among CoastAlaska, which donated two portable radio station kits; WNYC-New York and WMFE-FM Orlando, which offered engineering expertise; and Alaska Airlines, which provided free shipping for the 4,300-mile flight.”¹⁵

WTJX, which provides public radio to the U.S. Virgin Islands, had its PRSS downlink satellite dish destroyed by hurricane-force winds on September 20, 2017. The station managed to restore on-air operations following the storm and soon thereafter assembled together parts of a different downlink antenna to restore PRSS feeds. With NPR assistance, a new permanent PRSS downlink satellite dish was installed in mid-December.

In Puerto Rico, hurricane-force winds also damaged WRTU’s transmitter site and San Juan studios on September 20, 2017. The station’s ability to broadcast was subsequently restored by engineers from WNYC who installed a temporary low-power transmitter provided by Alaska Public Radio. WRTU is still relying on its emergency generator to stay on the air.

Conclusion

NPR offers these data and stories to provide a sense of the important role that public radio stations played in the 2017 hurricane season and to reinforce the critical role that the PRSS continues to serve in providing continuous news and emergency alerts in such environments.

¹⁴ *Id.*

¹⁵ *Id.*

Respectfully submitted,

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