



National Weather Association

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March 2, 2016

The Honorable John Thune
Chairman, Committee on Commerce, Science and Transportation
Committee on Commerce, Science and Transportation
U.S. Senate
Washington, DC 20510

Dear Mr. Chairman:

The National Weather Association (NWA) is a member-led, all-inclusive, professional association supporting and promoting excellence in operational meteorology and related activities since its founding in 1975. We currently have 2200 individual and corporate members. The NWA mission is to connect operational meteorologists in pursuit of excellence in weather forecasting, communication and service.

Many of our members are meteorologists who also are members of the American Meteorological Society (AMS). Enclosed is a letterⁱ filed jointly with AMS in a Federal Communications Commission proceeding concerning the possible commercial sharing of 1675-1680 megahertz spectrum with terrestrial commercial wireless services.

We know the committee will be marking up S.2555 "Making Opportunities for Broadband Investment and Limiting Excessive and Needless Obstacles to Wireless Act" or the "MOBILE NOW Act" tomorrow and that Section 3 currently recommends that 255 megahertz of Federal and non-Federal spectrum be made available for mobile and fixed wireless use.

NWA is concerned that direct broadcast spectrum used by Federal weather satellites, especially the new generation as described below, could be included in the 255 megahertz of Federal and non-Federal spectrum below six gigahertz as mentioned in Section 3.

Many of our members benefit from products that are created using Federal data in the 1675-1695 megahertz spectrum, with specific services that fall within 1675-1680 megahertz band segment. **The NWA is concerned that radio frequency interference from strong terrestrial signals will disrupt the timely and**

reliable receipt of meteorological data in this spectrum, negatively impacting the readiness of American communities for severe weather.

There is a new generation of geostationary satellite being readied for launch by NOAA, called the Geostationary Operational Environmental Satellite R-Series or GOES-R, which will bring a myriad of new capabilities to the nation's weather enterprise. Here in Oklahoma, we are commonly subject to severe weather and tornados. As you can see from the National Weather Service statistics for Monthly and Annual Tornado Statistics for Oklahomaⁱⁱ, damage to property and danger to life from tornados resonate strongly with the citizens of our state. One of the new capabilities of the GOES-R satellite series is a new lightning mapper payload that can substantially increase the lead-time for tornado warnings. This new feature will utilize the direct broadcast from the GOES-R satellites in the 1675-1695 megahertz spectrum to insure the fastest possible means for this data to arrive at forecasters, resulting in warnings for emergency managers, local government decision makers and the general public.

The new higher resolution images from GOES-R series of satellites, developed from a new generation of imager payload, will be essential for the forecast of hurricanes, severe weather, and the operation of ground, sea and air transportation.

For data that must be received quickly or must always be available to protect lives and property, the GOES-R direct broadcast in 1675-1695 megahertz is simply essential and we cannot threaten it with interference. And unlike the band that was recently sold at auction for polar satellite data, geostationary weather satellite data from GOES and GOES-R is used by nearly all the private sector weather industry and for key Federal centers and forecast offices. Everyone relies on GOES and will use GOES-R.

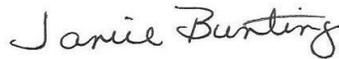
Additionally, the water infrastructure that provides river, stream and coastal measurements of flow and height, moves in near-real time via the GOES-R satellites in 1675-1680 megahertz. **One of the main centers receiving this data is the USGS Earth Resources Observation and Science (EROS) Center, located in South Dakota.** Many National Weather Service warnings for flooding are derived from these gages, relayed via the GOES-R satellite in this spectrum band. Wildfire weather data passes through this spectrum, to assist firefighters throughout the regions of this nation that are subject to such events. State, local and private water consolidators monitor reservoirs and Federal agencies oversee dams and locks that enable inland water transportation and operation of hydroelectric plants, all using sensors in the 1675-1680 megahertz spectrum.

Our equipment suppliers tell us that receiving this critical data in ground stations will be at risk, as it is nearly impossible to filter out the strong terrestrial signals without eliminating the desired meteorological data with the mitigation.

The NWA opposes sharing of the 1675-1680 megahertz spectrum and requests that it be DELETED from the bandwidth under consideration in the Act for fixed and wireless applications.

We ask for your immediate attention to this issue by eliminating the language that threatens severe weather forecasts in Section 3 of this Act in advance of its markup on March 3, 2016.

Sincerely,



Janice Bunting
Executive Director

ⁱ <http://apps.fcc.gov/ecfs/document/view?id=60001525404>

ⁱⁱ Tornado statistics <http://www.srh.noaa.gov/oun/?n=tornadodata-ok-monthlyannual>

Enclosure

CC: The Honorable Bill Nelson,
Ranking Member

The Honorable Marco Rubio
Chairman, Oceans, Atmosphere, Fisheries and Coast Guard Subcommittee

The Honorable Cory Booker
Ranking Member, Oceans, Atmosphere, Fisheries and Coast Guard
Subcommittee

The Honorable Richard Shelby
Chairman, Commerce, Justice, Science and Related Agencies Subcommittee,
Committee on Appropriations

The Honorable Barbara Mikulski,
Ranking Member, Committee on Appropriations

The Honorable James Inhofe

The Honorable James Lankford