



July 11, 2019

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

Re: Public Safety Engineering Report, Roberson & Associates,  
*Analysis of Impact of Unlicensed U-NII-5 Devices on RigNet 6 GHz  
Backhaul Network and Broadband Wireless Communications*  
Unlicensed Use of the 6 GHz Band, **ET Docket No. 18-295**

Dear Ms. Dortch:

RigNet commissioned an independent analysis of the effects of unlicensed use of 6 GHz on its WiMAX and LTE network in the Gulf of Mexico by the respected public safety communications engineering firm of Roberson & Associates, and the report of that analysis is attached for the record and consideration by the FCC. We expected that it would support RigNet's own calculations, but the report actually shows that the interference would be much worse and the effects on critical communications, public safety and first responder communications, 9-1-1 and safety-related sensors riding on RigNet's 6 GHz backhaul network would be catastrophic.

The analysis by Roberson's expert engineers shows that even small numbers of indoor devices can harm critical coastline-crossing links and completely sever mission critical and real-time monitoring services from multiple platforms. Their calculations show that even small numbers of in the vicinity of the nodes of the 6 GHz network would cause extremely high levels of interference. In fact, the expected interference caused by indoor unlicensed devices in the vicinity of these point-to-point receivers would cause the interference to exceed the specification by 37 dB to 54 dB (5000 to 250,000 times). These interference levels would render the point-to-point backbone links inoperable and disrupt critical communications for oil and gas production platforms in the Gulf. To quote the report, "*the disruption would also render 9-1-1 and emergency responses inoperable*" (emphasis supplied)."

As another tropical storm rips through the Gulf of Mexico and oil platforms are being evacuated, the importance of critical communications is manifest.

Based on the findings of Roberson's analysis and the previous analysis provided by RigNet which Roberson confirms, RigNet most strongly urges the Commission to exclude the Gulf of Mexico from the rulemaking and to provide 35-mile exclusion zones around the few coastline crossings where the 6 GHz comes ashore. To do otherwise would endanger public safety and critical communications in the Gulf of Mexico.

Very respectfully,

*James Arden Barnett, Jr*

James Arden Barnett, Jr.  
Rear Admiral, USN (Retired)  
Senior Vice President

Enclosure

cc:	Aaron Goldberger	Julius Knapp
	Zenji Nakazawa	Ron Repasi
	Donald Stockdale	Ira Keltz
	Dana Shaffer	Michael Ha
	Erin McGrath	Roger Noel
	William Davenport	Lloyd Coward
	Will Adams	Lisa Fowlkes
	Umair Javed	David Furst
	Travis Litman	Debra Jordan
	Nicole McGinnis	Randy Clarke