

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
)  
Wireless Telecommunications Bureau Seeks ) WT Docket No. 12-176  
Comment on Request for Waiver of Part 80 to )  
Allow Certification and Use of Seareka Maritime)  
Survivor Locating Device Operating on )  
Frequency 869 MHz )

**REPLY COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®**

CTIA – The Wireless Association® (“CTIA”) respectfully submits these Reply Comments opposing Whiffletree Corporation Inc.’s (“Whiffletree”) request for waiver of Section 80.1061 of the Commission’s rules to permit equipment certification and use of Seareka’s Maritime Survivor Locating Device (“MSLD”)<sup>1</sup> on 869.40-869.65 MHz frequency for man-overboard incidents.<sup>2</sup> As commenters have noted, because Whiffletree proposes that Seareka operate in heavily used cellular frequencies, there is a significant risk that the MSLD’s operation will cause harmful interference to incumbent cellular and Specialized Mobile Radio (“SMR”) operations. Whiffletree has failed to provide evidence that the Seareka MSLD can operate without causing such harmful interference. Further, CTIA is concerned whether the MSLD can effectively operate on the requested 869 MHz frequency, and that its life-saving benefits would be much less than if the Seareka used the 406 MHz frequency specified by the Commission’s rules. For this reason, CTIA submits that Whiffletree has failed to satisfy the Commission’s waiver standard, and that the Commission should dismiss Whiffletree’s Request.

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<sup>1</sup> *Wireless Telecommunications Bureau Seeks Comment on Request for Waiver of Part 80 to Allow Certification and Use of Seareka Maritime Survivor Locating Device Operating on Frequency 869 MHz*, Public Notice, DA 12-1002 (June 27, 2012) (“Public Notice”).

<sup>2</sup> Letter to the Federal Communications Commission from George E. Lariviere, Vice President, Whiffletree Corporation Inc. (Apr. 30, 2012) (“Whiffletree Request”).

**I. COMMENTERS ARE CORRECTLY CONCERNED THAT THE SEAREKA MSLD WILL CAUSE INTERFERENCE TO INCUMBENT NETWORKS.**

In their opening comments, AT&T, Sprint, and Verizon Wireless all expressed concern that the Seareka MSLD would cause harmful interference to their networks, disrupting commercial and public safety communications on land and potentially endangering the safety of individuals at sea. CTIA agrees and believes that, at a minimum, the Commission must require Whiffletree to submit technical evidence that its proposed operations would not cause harmful interference. Even then, the Commission must conduct a thorough investigation and analysis of the evidence submitted to determine that interference would not take place.

As AT&T correctly observed in its comments, the 800 MHz spectrum that Whiffletree seeks to access is exclusively licensed to CMRS providers under Section 301 of the Communications Act,<sup>3</sup> and these frequencies are some of the most intensively-used frequencies in the electromagnetic spectrum.<sup>4</sup> Cellular market areas in coastal areas extend over water from the Pacific and Atlantic coastlines over the Great Lakes, and the Commission also has issued cellular licenses for the Gulf of Mexico.<sup>5</sup> It is common for cellular base stations to be located near the coastline to promote robust service – enabling other potentially life-saving functions – that well extends from the coast and out into sea.<sup>6</sup> For this reason, interference from Seareka’s MSLD to cellular base stations is a very real risk.

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<sup>3</sup> 47 U.S.C. § 301.

<sup>4</sup> Comments of AT&T Inc., WT Docket No. 12-176, at 4 (Jul. 27, 2012) (“AT&T Comments”).

<sup>5</sup> *Id.* at 4.

<sup>6</sup> *Id.* at 5.

Whiffletree asserts that the MSLD “uses a polite protocol that checks for other traffic prior to transmitting,”<sup>7</sup> but provides no details about how the device will ensure that it does not operate when the 869 MHz frequency is in use by a cellular licensee. CTIA further shares Verizon Wireless’ concern that “[t]here is also little to no information . . . about the types of transmitters used in the life vests and on marine vessels, the types of antennas that will be used, and how MSLDs react when the frequency is in consistent use by others.”<sup>8</sup> And, as AT&T correctly noted, “[t]he life-jacket based sensing receiver will be at sea level and receive a weaker cellular signal than if operated in the same plane as mobile handsets, increasing the likelihood the MSLD will not ‘sense’ or accurately identify the cellular signal and will transmit over occupied cellular frequencies and interfere with cellular service.”<sup>9</sup> Whiffletree’s proposal makes no mention of the fact that the Commission has assigned A Block cellular licenses for the Gulf of Mexico and that this spectrum is actively used to provide service in the Gulf.<sup>10</sup> This lack of information regarding interference prevention must be addressed by Whiffletree and the Commission.

Not only do Whiffletree’s proposed operations threaten cellular networks, but they also create the risk of harmful interference to adjacent SMR services. Sprint has stated that its SMR and Cellular (via roaming) services “provide a critical public safety function on inland and coastal waterways for the benefit of subscribers when and where they need it most.”<sup>11</sup> Because

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<sup>7</sup> Whiffletree Request at 2.

<sup>8</sup> Comments of Verizon Wireless, WT Docket No. 12-176, at 5 (Jul. 27, 2012) (“Verizon Wireless Comments”).

<sup>9</sup> AT&T Comments at 6.

<sup>10</sup> *Id.*

<sup>11</sup> Comments of Sprint Nextel Corporation, WT Docket No. 12-176, at 3 (Jul. 27, 2012) (“Sprint Comments”).

the 869 MHz frequency sought by Whiffletree is immediately adjacent to Sprint's 800 MHz operations, Sprint correctly is "deeply concerned about the possibility for interference to Sprint's network or customer devices."<sup>12</sup>

For this reason, CTIA agrees with AT&T, Sprint, and Verizon Wireless that the Commission must compel Whiffletree to provide more technical specifications describing its MSLD. Verizon Wireless has attached to its Comments a list of questions that it believes should be asked of Whiffletree, and CTIA agrees that this list provides an important starting point.<sup>13</sup> However, CTIA also notes Sprint's observation that even those devices that operate in accordance with Part 80 of the Commission's rules can still be operated outside of their design parameters through "mishandling, testing, and other actions."<sup>14</sup> CTIA therefore believes that the full interference potential of this device must be evaluated by the Commission, and that the Commission should take no action that would place incumbent operations at risk.

## **II. IT IS UNCLEAR WHETHER THE SEAREKA MSLD CAN EFFECTIVELY OPERATE ON THE REQUESTED FREQUENCY**

Not only does the Seareka MSLD carry the potential to cause significant harmful interference to cellular networks, CTIA also is concerned that use of this spectrum by the MSLD will compromise its utility and potentially "render the MSLDs useless in critical situations."<sup>15</sup> Under the "polite protocol" described by Whiffletree, the MSLD will check for other traffic prior to transmitting, and then its transmissions will take place in short, 120-millisecond bursts.<sup>16</sup>

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<sup>12</sup> Sprint Comments at 2.

<sup>13</sup> Verizon Wireless Comments at 8.

<sup>14</sup> Sprint Comments at 3.

<sup>15</sup> Verizon Wireless Comments at 2.

<sup>16</sup> Whiffletree Request at 2.

Because cellular base stations transmit constantly, it is highly unlikely that there would be 120 millisecond transmission gaps in which the Seareka MSLD could operate, even assuming that the MSLD would have the technical capabilities to instantly sense these gaps.<sup>17</sup> CTIA agrees with Verizon Wireless that “[g]iven the high probability that the cellular 869 MHz frequency band will be in use at any point in time in the United States, its territorial waters and in the Gulf of Mexico, and Whiffletree’s assertion that the MSLD will not transmit when the frequency is in use, it is unlikely that the Seareka device will be able to operate effectively on any body of water within range of a Cellular A Block base station.”<sup>18</sup>

Further complicating the operational picture for MSLDs is the fact that a ship-based MSLD receiver, which would presumably be mounted at an elevated location, would likely receive a much stronger signal from a cellular base station than it would from the life jacket’s transmitter, and may not function properly in such an environment.<sup>19</sup> And, as AT&T observes, cellular base stations intended to transmit over water are likely to be transmitting at a particularly high power from a higher elevation.<sup>20</sup> This fact makes it unlikely that the MSLD would function effectively when in range of a cellular base station.

Because of the high risk that cellular base stations would interfere with a MSLD and render it inoperable either before or during a nautical emergency, CTIA believes that reliance on cellular frequencies in such life-threatening situations creates an untenable risk. CTIA notes Verizon Wireless’ observation that “it is easy to envision a request to shut down cellular

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<sup>17</sup> Verizon Wireless Comments at 4.

<sup>18</sup> *Id.*

<sup>19</sup> AT&T Comments at 5.

<sup>20</sup> *Id.*

operations on the 869 MHz frequency until the rescue mission is completed.”<sup>21</sup> However, it would not be practical for the industry to attempt to identify, isolate and address suspension of cellular service under such circumstances, and it could jeopardize the ability of other, cellular users to complete important and potentially critical communications. The Commission should therefore find that the proffered benefits of the MSLD are greatly reduced by the complications inherent in the cellular environment.

### **III. WHIFFLETREE DOES NOT SATISFY THE COMMISSION’S WAIVER STANDARD**

Finally, the Commission should dismiss the Whiffletree Request for failing to meet the Commission’s standard for rule waivers. Under the Commission’s rules, the Commission may grant a request for waiver only upon a demonstration that “[t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest” or “[i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”<sup>22</sup> Whiffletree has failed to make this requisite showing. As noted above, grant of the waiver risks creating significant harmful interference to CMRS operations. Further, the benefits of such interference-causing operation are dubious when Whiffletree has made no showing that the Seareka would be capable of functioning properly within range of a cellular base station.

Further, the Commission already has set allocated frequencies for products such as the Seareka MSLD. Specifically, the Commission’s rules allocate the 406 MHz frequency for these uses, and Whiffletree markets several marine life saving products that operate on this

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<sup>21</sup> Verizon Wireless Comments at 4.

<sup>22</sup> 47 C.F.R. § 1.925(b)(3).

frequency.<sup>23</sup> Whiffletree argues, however, that use of this frequency would be costly for the company.<sup>24</sup> CTIA agrees with AT&T that the “waiver process should not be used as a vehicle to lower the costs of entry for individual manufacturers, particularly when the requested waiver raises significant interference issues.”<sup>25</sup> Any cost savings experienced by Whiffletree potentially burdens other users and is not a benefit justifying a waiver under the Commission’s standard.

#### IV. CONCLUSION

For the reasons above, CTIA opposes the Whiffletree Request as filed, and urges the Commission to compel Whiffletree to provide more technical specificity regarding its MSLD or dismiss the Whiffletree Request.

Respectfully submitted,

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<sup>23</sup> See WhiffleTech Marine Safety, at <http://whiffletreecorp.com/marine/marinehome.htm> (last visited August 9, 2012).

<sup>24</sup> Whiffletree Request at 2.

<sup>25</sup> AT&T Comments at 9.