



Federal Communications Commission  
Washington, D.C. 20554

March 19, 2015

Amy Sanvido  
Bird Technologies  
30303 Aurora Rd.  
Solon, Ohio 44139

DA 15- 353

Re: Bird Technologies' Request for Waiver of Section 90.219 Regarding Signal Booster Designation;  
WT Docket 10-4

Dear Ms. Sanvido:

In this letter, we grant a request by Bird Technologies (Bird) to waive the labeling requirements for Part 90 signal boosters so that it can seek an equipment authorization designation for its Bird Signal Booster III, as described in Bird's request (Signal Booster III), under both Class A and Class B.<sup>1</sup> Granting the Waiver Request will preserve the intent of the Commission's rules while providing licensees who require signal boosters increased choice and flexibility. We therefore find that granting the Waiver Request is in the public interest.

Section 90.219 of the Commission's rules<sup>2</sup> provides the technical and operational rules for the use of signal boosters in the Private Land Mobile Radio Services (PLMRS) and distinguishes between Class A (narrowband) signal boosters and Class B (wideband) signal boosters.<sup>3</sup> Section 90.219(e)(5) requires that a Part 90 signal booster must be labeled to indicate whether it is a Class A or Class B device, as well as include an advisory stating that the user must be an FCC licensee or have the express consent of a licensee to operate the device and that the user must register Class B signal boosters.<sup>4</sup>

Bird explains that it has developed the Signal Booster III so that the end user can configure it to operate as either a Class A or Class B signal booster.<sup>5</sup> On January 9, 2015, Bird filed a Petition for Waiver seeking waiver of section 90.219(e)(5) of the Commission's rules<sup>6</sup> so that the Bird Signal Booster III "may be labeled and marketed as both Class A and Class B while providing ample communication to the end user of the special regulatory requirements of a Class B device should that mode be selected."<sup>7</sup> On January 29, 2015, the Wireless Telecommunications Bureau issued a *Public Notice* seeking comment on the Waiver Request.<sup>8</sup> No comments were filed in response to the *Public Notice*.

Bird explains that a Signal Booster III leaving the factory has the potential to be either a Class A or B signal booster, and "it isn't known in advance which it will be," as the end user determines how the booster will

---

<sup>1</sup> See Petition for Waiver of Bird Technologies, filed Jan. 9, 2015 (Waiver Request).

<sup>2</sup> 47 C.F.R. § 90.219.

<sup>3</sup> 47 C.F.R. § 90.219(a). Class B signal boosters may be deployed at fixed locations only and must be registered in the FCC signal booster database online at [www.fcc.gov/signal-boosters/registration](http://www.fcc.gov/signal-boosters/registration). See *id.* at § 90.219(d)(4) and (5).

<sup>4</sup> See *id.* at § 90.219(e).

<sup>5</sup> See Waiver Request at 3.

<sup>6</sup> See 47 C.F.R. § 90.219(e).

<sup>7</sup> Waiver Request at 3.

<sup>8</sup> Wireless Telecommunications Bureau Seeks Comment on Bird Technologies' Request for Waiver of Section 90.219 Regarding Signal Booster Designation, *Public Notice*, WT Docket 10-4, DA 15-133 (WTB Jan. 29, 2015) (*Public Notice*).

be configured and operated.<sup>9</sup> As such, Bird states, to comply with section 90.219(e)(5) and receive an equipment authorization, the Signal Booster III would have to include separate Class A and Class B labels.<sup>10</sup> Bird therefore requests a waiver of section 90.219(e)(5) so that it may use a single label designating the Signal Booster III as both a Class A and Class B signal booster while remaining compliant with the Commission's rules.<sup>11</sup>

In lieu of separate Class A and B labels, Bird suggests incorporating safeguards into the Signal Booster III's software as well as affixing a label with alternative language to that stipulated by section 90.219(e)(5). Bird states that the Signal Booster III's software user interface (UI) has safeguards built in that notify the operator that he must register the device if he intends to use it as a Class B signal booster.<sup>12</sup> Specifically, "the UI will contain a check box (Image A) that will allow the customer to choose Class B mode and allow programming of filters greater than 75kHz. A warning will then be displayed stating that the booster will need to be registered since it is now acting as a Class B booster (Image B). If the customer has not selected the Class B check-box, then the UI will not allow a filter width to be programmed greater than 75kHz. If attempted, the user will receive a statement indicating that they must engage Class B operation as described above (Image C). This will ensure the original intent of the Class A versus Class B designation. On start-up, the booster validates the widths of programmed filters. If any are configured wider than 75 kHz and the booster is set to Class A mode an error screen as shown in image (D) will appear and the offending filter or filters must be corrected or the booster must be switched to Class B mode as described above."<sup>13</sup> The images depicting these warnings are attached hereto as Attachment A. Bird maintains that these warnings will provide the consumer with flexibility of use "while keeping intact the original purpose of the class distinction."<sup>14</sup>

In addition, Bird proposes to affix a label to each Signal Booster III that will state: "WARNING: This is NOT a CONSUMER device. It is designed for ...or express consent of an FCC Licensee to operate this device. This booster can be configured as a Class A or a Class B signal booster. If configured as Class B signal booster (as defined in 47 CFR 90.219), You MUST register this signal booster online at..."<sup>15</sup>

Pursuant to section 1.925 of the Commission's rules, waiver may be granted if the petitioner establishes that: (1) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and the grant of the waiver would be in the public interest; or (2) in light of unique or unusual factual circumstances, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.<sup>16</sup> In addition, the Commission may waive any provision of its rules if good cause is shown.<sup>17</sup> Based on the warnings Bird proposes to incorporate into the Signal Booster III's UI as well as in the alternate label affixed to the device, we find unique factual circumstances exist that warrant a waiver in this case.

---

<sup>9</sup> See Waiver Request at 2.

<sup>10</sup> See *id.*

<sup>11</sup> See *id.*

<sup>12</sup> See *id.* at 3.

<sup>13</sup> *Id.*

<sup>14</sup> See *id.*

<sup>15</sup> See *id.*

<sup>16</sup> 47 C.F.R. § 1.925(b)(3).

<sup>17</sup> 47 C.F.R. § 1.3.

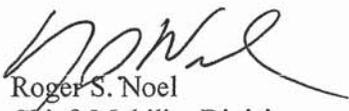
In 2013, the Commission created a new regulatory framework for consumer signal boosters while preventing, controlling, and, if necessary, resolving interference to wireless networks.<sup>18</sup> As part of that rulemaking, the Commission also addressed the deployment and operation of Part 90 signal boosters, adopting new labeling requirements. In doing so, the Commission stated that “the deployment of Part 90 PLMR signal boosters has generated substantial benefits . . . . We seek to support the continued use of well-designed, properly installed signal boosters and believe the actions we take in this proceeding . . . will further reduce the potential for harmful interference caused by signal boosters.”<sup>19</sup> In particular, the labeling requirements were intended to “increase rule compliance and remind signal booster operators about proper implementation of the devices.”<sup>20</sup> We believe that granting Bird a waiver in this case meets our goals of ensuring Part 90 PLMR licensees have continued access to non-interfering Part 90 signal boosters that best suit their needs while helping to ensure proper operation of the signal booster. We therefore find that granting the Waiver Request is in the public interest and waive section 90.219 as described herein.

This waiver is specifically conditioned on the following:

- (1) Each Signal Booster III must have a label affixed to it with the advisory: “WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. This booster can be configured as a Class A or a Class B signal booster. If configured as Class B signal booster (as defined in 47 CFR 90.219), you MUST register this signal booster online at [www.fcc.gov/signal-boosters/registration](http://www.fcc.gov/signal-boosters/registration). Unauthorized use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation.”
- (2) Each Signal Booster III must include the safeguards incorporated into the UI substantially as described above.
- (3) This waiver applies only to the Bird Signal Booster III.
- (4) A copy of this waiver must be included in the application for certification of the Signal Booster III.

Accordingly, IT IS ORDERED that, pursuant to Section 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and sections 0.331, 1.3, and 1.925 of the Commission’s rules, 47 C.F.R. §§ 0.331, 1.3, 1.925, the Waiver Request is GRANTED to the extent described above.

Sincerely,

  
Roger S. Noel  
Chief, Mobility Division  
Wireless Telecommunications Bureau  
Federal Communications Commission

<sup>18</sup> See Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission’s Rules to Improve Wireless Coverage Through the Use of Signal Boosters, *Report and Order*, WT Docket No. 10-4, 28 FCC Rcd 1663, 1667 ¶ 9 (2013) (*Report and Order*).

<sup>19</sup> *Id.* at 1714 ¶ 146.

<sup>20</sup> *Id.* at 1730 ¶ 188.

Attachment A

Filters Filter Detail Link FFT **System**

**System Info**

Control Panel Revision	<input type="text" value="null (null)"/>
System Controller Revision	<input type="text" value="Nov 14 2014 12:57:00"/>
Java Version	<input type="text" value="1.7.0_72"/>
Java Vendor	<input type="text" value="Oracle Corporation"/>
Location/Name	<input type="text"/>

700 MHz  
 800 MHz  
 UHF

**Oscillation Action**

Retry Interval  sec Retry Limit

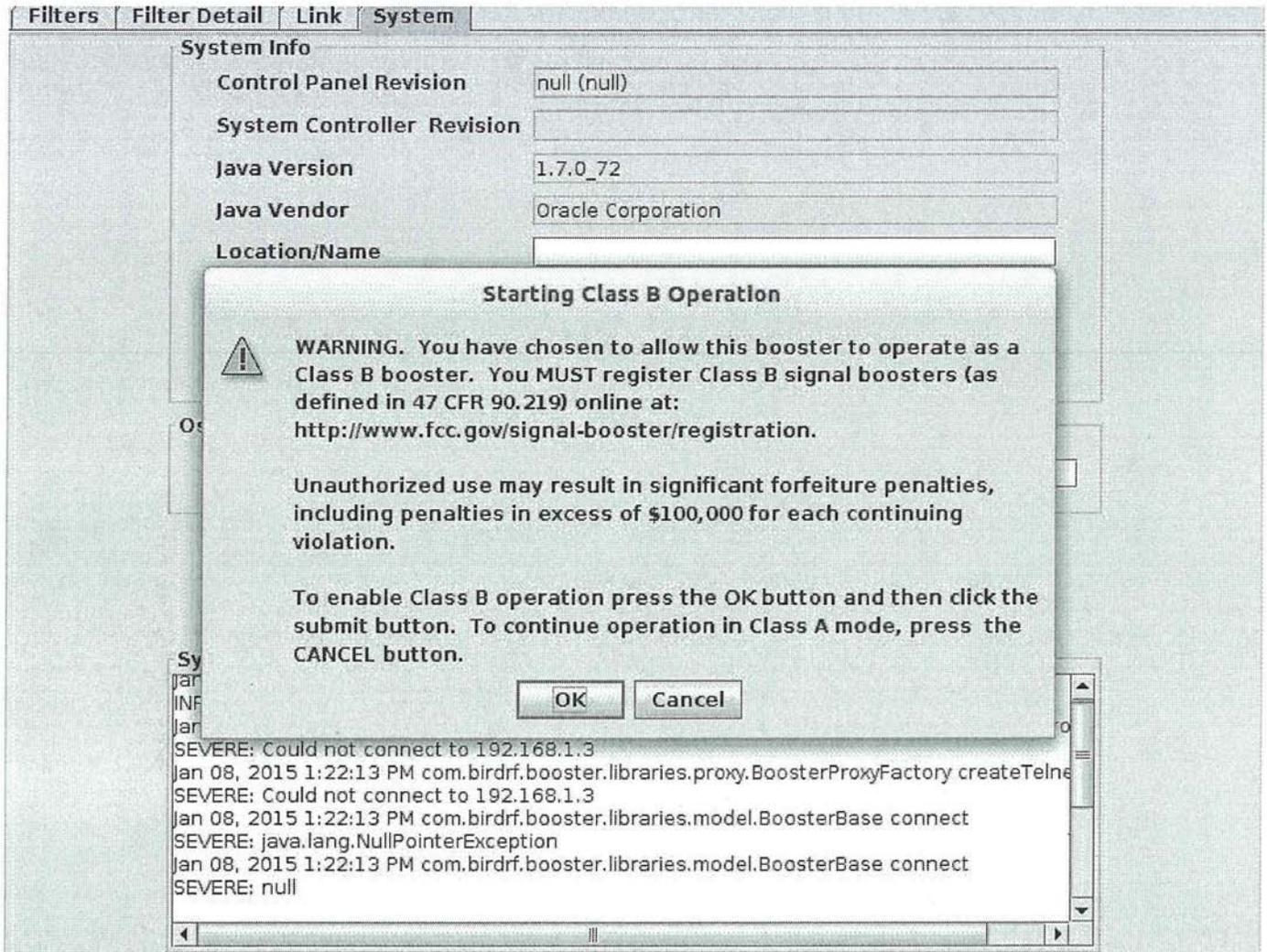
Enable Class B Operation

**System Log**

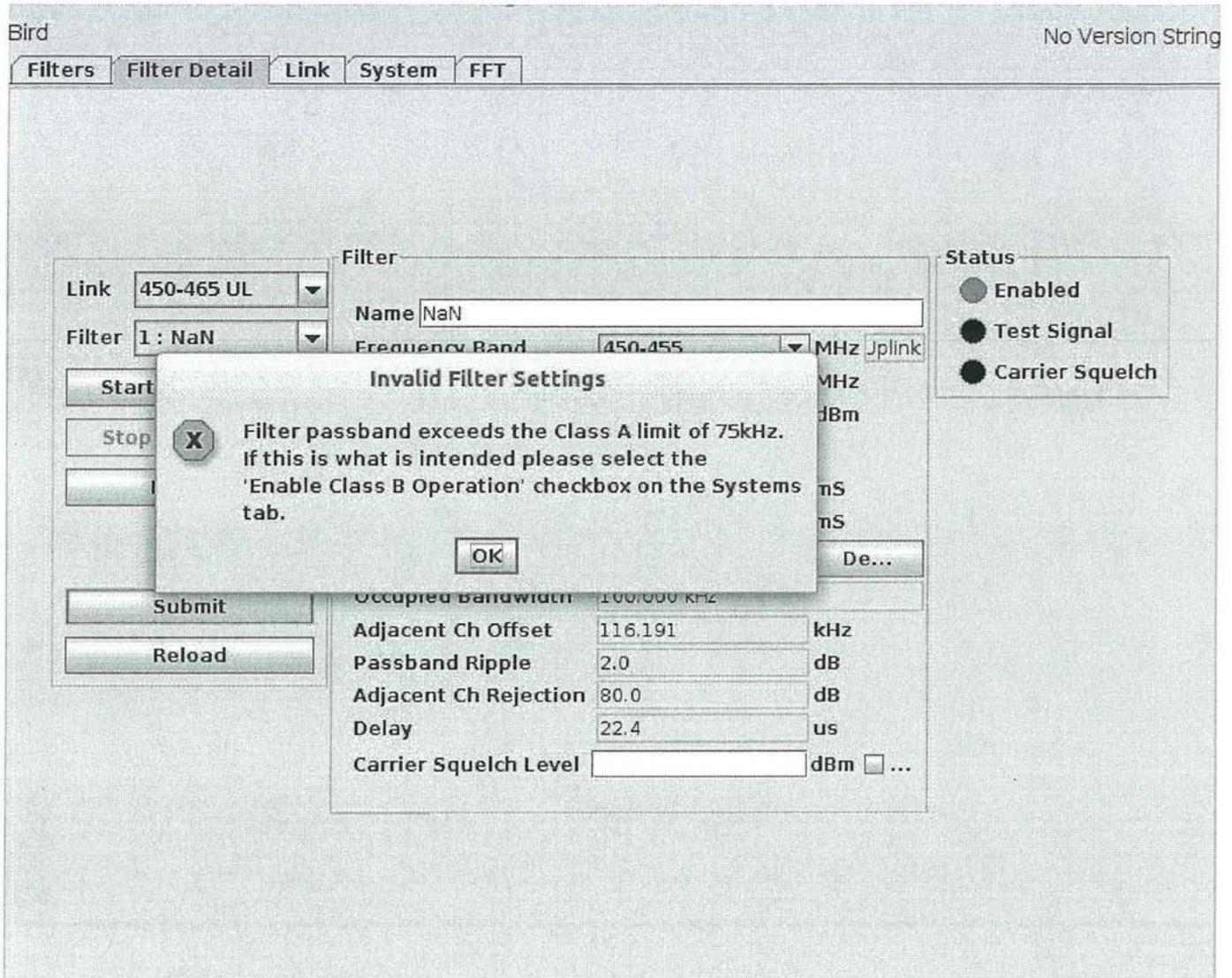
```
Jan 06, 2015 11:32:18 AM com.birdrf.booster.libraries.model.BoosterBase createLinkList
INFO: Channel module link is present at address 0x 0
Jan 06, 2015 11:32:18 AM com.birdrf.booster.libraries.model.BoosterBase createLinkList
INFO: Channel module link is present at address 0x 1
Jan 06, 2015 11:32:41 AM com.birdrf.booster_pro.controlPanel.ControlPanelModel$6 doInBa
SEVERE: Configuration Read Done
Jan 06, 2015 11:32:41 AM com.birdrf.booster_pro.controlPanel.ControlPanelModel$6 doInBa
SEVERE: 523 message were sent to get configuration
Jan 06, 2015 11:32:41 AM com.birdrf.booster_pro.controlPanel.ControlPanelModel$6 doInBa
SEVERE: It took 23000 milliseconds to load config
```

Connected to /192.168...

**Image A: Systems Tab with "Enable Class B Operation" check box**



**Image B: Registration Warning for Class B operation**



**Image C: Error while in Class A mode**

Filters | Filter Detail | Link | System

Link: 450-465 UL

All Filters: Level Change: 0 dB [Submit]

#	Name	Center	Width	En	T/C	Ca	In (dBm)	Set (dBm)	Out (dBm)	Out
1								0.0		
1								0.0		
1								0.0		
1										
1										
15				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
16				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
17				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
18				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
19				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
20				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
21				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
22				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
23				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
24				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
25				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
26				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
27				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

**Class A Limit Exceeded**

**WARNING:** This booster contains filters that exceed the Class A limit of 75 kHz, but has not yet been set for Class B operation.

If this device has been registered with the FCC as a Class B signal booster, please go to the System Tab and select the 'Enable Class B Operation' checkbox.

If this device has not been registered with the FCC, please reduce the passband width of all filters to below 75 kHz

[OK]

**Image D: Error on System Check on UI start-up**