

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	File No: EB-FIELDWR-12-00002815
	)	
Directlink, LLC	)	NAL/Acct. No.: 201332800001
	)	
Parker, Colorado	)	FRN: 0020233508
	)	

**NOTICE OF APPARENT LIABILITY FOR FORFEITURE AND ORDER**

Adopted: January 3, 2013

Released: January 4, 2013

By the District Director, Denver Office, Western Region, Enforcement Bureau:

**I. INTRODUCTION**

1. In this Notice of Apparent Liability for Forfeiture and Order (NAL), we find that Directlink, LLC<sup>1</sup> (Directlink), operator of an Unlicensed National Information Infrastructure (U-NII) transmission system in Elizabeth, Colorado, apparently willfully and repeatedly violated Sections 301 and 302(b) of the Communications Act of 1934, as amended, (Act)<sup>2</sup> and Sections 15.1(b) and 15.1(c) of the Commission's rules (Rules)<sup>3</sup> by operating an intentional radiator without a license and in a manner inconsistent with Part 15 of the Rules<sup>4</sup> and the device's equipment authorization. We conclude that Directlink is apparently liable for a forfeiture in the amount of twenty-five thousand dollars (\$25,000). In addition, we direct Directlink to submit, no later than thirty (30) calendar days from the date of this NAL, a statement signed under penalty of perjury by an officer or director of the company stating that it is currently operating its U-NII systems in compliance with FCC rules and applicable authorizations.

**II. BACKGROUND**

2. Part 15 of the Rules allows devices employing relatively low-level radiofrequency (RF) signals to be operated without individual licenses, as long as their operation causes no harmful interference to licensed services and the devices do not generate emissions or field strength levels greater than a specified limit.<sup>5</sup> Such devices must be authorized and operated in accordance with the Part 15 Rules.<sup>6</sup> For example, Section 15.1(c) of the Rules provides that an intentional radiator must operate consistent with the terms of their station authorizations.<sup>7</sup> Operating an RF device, such as an

<sup>1</sup> Directlink, LLC, holds three FCC licenses for microwave operations (call signs WQPL428, WQPL429, and WQPL430).

<sup>2</sup> 47 U.S.C. §§ 301, 302a(b); *see also* 47 C.F.R. § 15.407.

<sup>3</sup> 47 C.F.R. § 15.1(b), (c).

<sup>4</sup> 47 C.F.R. §§ 15.1 *et seq.*

<sup>5</sup> *Revision of Part 15 of the Rules Regarding the Operation of Radio Frequency Devices Without an Individual License*, First Report and Order, 4 FCC Rcd 3493 (1989).

<sup>6</sup> 47 C.F.R. §§ 15.1(a), 15.5.

<sup>7</sup> *See* 47 C.F.R. § 15.1(c). Section 15.201(b) of the Rules provides that all intentional radiators operating under Part 15 of the Rules shall be certificated by the Commission. 47 C.F.R. § 15.201(b). The Commission issues

(continued....)

intentional or unintentional radiator, that is not in compliance with its authorization or the Part 15 Rules is a violation of Section 302(b) of the Act.<sup>8</sup> Additionally, operating a Part 15 device in a manner that is inconsistent with the Part 15 Rules requires a license pursuant to Section 301 of the Act. Operation of such a device without a license violates that provision.<sup>9</sup>

3. On January 10, 2012, in response to a complaint of interference, agents with the Enforcement Bureau's Denver District Office (Denver Office) used direction-finding techniques to determine that radio emissions on frequency 5630 MHz,<sup>10</sup> were emanating from the Red Fox Circle communications site in Elizabeth, Colorado. The FCC agents investigated the system and identified Directlink as its operator. On January 12, 2012, the agents used those same techniques in combination with Directlink's involvement to confirm that the interference was emanating from the U-NII transmission system<sup>11</sup> operated by Directlink. On January 12, 2012, an FCC agent's telephone call to the FAA confirmed that the U-NII interference had ceased when Directlink changed its center frequency from 5630 MHz to 5785 MHz during the Denver Office investigation. The U-NII system utilized a transceiver module, model Rocket M5, an intentional radiator manufactured by Ubiquiti Networks, Inc.<sup>12</sup> The FCC Equipment Authorization for the Ubiquiti Rocket M5 transceiver limits the device to operations within a frequency range of 5745 MHz to 5825 MHz.<sup>13</sup> During the inspection, however, the FCC agents observed that the transceiver was operating on a center frequency of 5630 MHz, which is outside the authorized frequency range of the device. Subsequently, Directlink remotely adjusted the device's operating frequency from 5630 MHz to 5785 MHz which ceased the interference impacting the Denver TDWR installation.<sup>14</sup>

4. In order to avoid interference to the FAA's TDWR installations, the Commission requires that U-NII devices operating in the 5.25 – 5.35 GHz and 5.47 – 5.725 GHz bands have Dynamic Frequency Selection (DFS) radar detection functionality, which allows them to detect the

---

(...continued from previous page)

equipment authorizations for such devices, which set forth relevant conditions for the grant.

<sup>8</sup> 47 C.F.R. § 15.1(c). *See* 47 U.S.C. § 302a(b).

<sup>9</sup> 47 C.F.R. § 15.1(b).

<sup>10</sup> The unauthorized emissions on frequency 5630 MHz impacted the Federal Aviation Administration's (FAA) Terminal Doppler Weather Radar (TDWR) system that serves the Denver International Airport. TDWR installations exist at 45 major airports in the United States and Puerto Rico. These radar installations assist air traffic controllers in detecting low-altitude wind shear that can pose a risk to aircraft. *See* MIT Lincoln Laboratories, <http://www.ll.mit.edu/mission/aviation/faawxsystems/tdwr.html> (last visited June 15, 2012).

<sup>11</sup> 47 C.F.R. § 15.403(s) (defining U-NII devices as “[i]ntentional radiators operating in the frequency bands 5.15-5.35 GHz and 5.470-5.825 GHz that use wideband digital modulation techniques and provide a wide array of high data rate mobile and fixed communications for individuals, businesses, and institutions”). Although Directlink's device was not authorized to operate in the U-NII bands, it was subject to the U-NII rules (47 C.F.R. 15.401-15.407) because Directlink operated it as a U-NII device.

<sup>12</sup> The device was a Ubiquiti model Rocket M5, FCC ID SWX-M5. Ubiquiti Networks, Inc., was issued a Grant of Equipment Authorization for the Rocket M5 by MET Laboratories, Inc., under the authority of the FCC, on August 14, 2009.

<sup>13</sup> The Equipment Authorization for the Ubiquiti Rocket M5 transceiver states that the device is certified for use pursuant to Part 15, Subpart C of the Rules (Intentional Radiators).

<sup>14</sup> Directlink changed the operating frequency of this system from 5630 MHz to 5785 MHz during the FCC investigation on January 12, 2012. As noted above, the Ubiquiti Rocket M5 transceiver is authorized to operate only within a frequency range of 5745 MHz to 5825 MHz.

presence of radar systems and avoid co-channel operations with radar systems.<sup>15</sup> As the inspection continued on January 12, 2012, FCC agents also observed and were advised by Directlink's representative that the transceiver was not operating with DFS functionality.

### III. DISCUSSION

5. Section 503(b) of the Act, provides that any person who willfully or repeatedly fails to comply substantially with the terms and conditions of any license, or willfully or repeatedly fails to comply with any of the provisions of the Act or of any rule, regulation, or order issued by the Commission thereunder, shall be liable for a forfeiture penalty.<sup>16</sup> Section 312(f)(1) of the Act defines "willful" as the "conscious and deliberate commission or omission of [any] act, irrespective of any intent to violate" the law.<sup>17</sup> The legislative history to Section 312(f)(1) of the Act clarifies that this definition of willful applies to both Sections 312 and 503(b) of the Act,<sup>18</sup> and the Commission has so interpreted the term in the Section 503(b) context.<sup>19</sup> The Commission may also assess a forfeiture for violations that are merely repeated, and not willful.<sup>20</sup> The term "repeated" means the commission or omission of such act more than once or for more than one day.<sup>21</sup>

#### A. Unlicensed Operation of U-NII Device

6. Section 301 of the Act prohibits the use or operation of any apparatus for the transmission of energy or communications or signals by radio within the United States except under and in accordance with the Act and with a license.<sup>22</sup> Part 15 of the Rules provides an exception to the license requirement of Section 301 and sets forth conditions under which intentional radiators may

---

<sup>15</sup> See 47 C.F.R. § 15.407(h)(2). See also Memorandum from Julius Knapp, Chief, Office of Engineering and Technology, FCC, and P. Michele Ellison, Chief, Enforcement Bureau, FCC, to Manufacturers and Operators of Unlicensed 5 GHz Outdoor Network Equipment Re: Elimination of Interference to Terminal Doppler Weather Radar (TDWR) (dated July 27, 2010), available at [http://www.wi-fi.org/files/FCC\\_Memorandum\\_on\\_UNII\\_Device\\_Operation\\_2010\\_07\\_27-M.pdf](http://www.wi-fi.org/files/FCC_Memorandum_on_UNII_Device_Operation_2010_07_27-M.pdf) (last visited Feb. 1, 2011).

<sup>16</sup> 47 U.S.C. § 503(b).

<sup>17</sup> 47 U.S.C. § 312(f)(1).

<sup>18</sup> H.R. Rep. No. 97-765, 97th Cong. 2d Sess. 51 (1982) ("This provision [inserted in Section 312] defines the terms 'willful' and 'repeated' for purposes of section 312, and for any other relevant section of the act (e.g., Section 503) . . . . As defined[,] . . . 'willful' means that the licensee knew that he was doing the act in question, regardless of whether there was an intent to violate the law. 'Repeated' means more than once, or where the act is continuous, for more than one day. Whether an act is considered to be 'continuous' would depend upon the circumstances in each case. The definitions are intended primarily to clarify the language in Sections 312 and 503, and are consistent with the Commission's application of those terms . . . .").

<sup>19</sup> See, e.g., *Application for Review of Southern California Broadcasting Co.*, Memorandum Opinion and Order, 6 FCC Rcd 4387, 4388 (1991), *recons. denied*, 7 FCC Rcd 3454 (1992).

<sup>20</sup> See, e.g., *Callais Cablevision, Inc.*, Notice of Apparent Liability for Monetary Forfeiture, 16 FCC Rcd 1359, 1362, para. 10 (2001) (*Callais Cablevision, Inc.*) (proposing a forfeiture for, *inter alia*, a cable television operator's repeated signal leakage).

<sup>21</sup> Section 312(f)(2) of the Act, 47 U.S.C. § 312(f)(2), which also applies to violations for which forfeitures are assessed under Section 503(b) of the Act, provides that "[t]he term 'repeated', when used with reference to the commission or omission of any act, means the commission or omission of such act more than once or, if such commission or omission is continuous, for more than one day." See *Callais Cablevision, Inc.*, 16 FCC Rcd at 1362.

<sup>22</sup> 47 U.S.C. § 301.

operate without an individual license.<sup>23</sup> Pursuant to Section 15.1(b) of the Rules, however, “operation of an intentional . . . radiator that is *not* in accordance with the regulations in this part *must be licensed* . . .”<sup>24</sup> Thus, if an intentional radiator fails to comply with the conditions set forth in its equipment authorization,<sup>25</sup> the operation is no longer covered by the unlicensed provisions of Part 15 and must be licensed pursuant to Section 301 of the Act.

7. On January 10 and 12, 2012, agents from the Denver District Office observed Directlink operating a Part 15 intentional radiator – a Ubiquiti Rocket M5 – on the center frequency of 5630 MHz with a bandwidth of 40 MHz from the Red Fox Circle communications site in Elizabeth, Colorado. On January 12, 2012, a representative from Directlink remotely modified the operating frequency of this site. The Agents confirmed with the FAA that the frequency change corrected the interference from this identified U-NII transmission system. The U-NII system utilized transceiver module model Rocket M5, an intentional radiator manufactured by Ubiquiti Networks, Inc.<sup>26</sup> The FCC Equipment Authorization for the Ubiquiti Rocket M5 transceiver limits the device to a frequency range of 5745 MHz to 5825 MHz.<sup>27</sup> During the investigation, however, the FCC agents observed that the transceiver was operating with a bandwidth of 40 MHz on a center frequency of 5630 MHz, a channel outside the authorized frequency range. As the inspection continued on January 12, 2012, the FCC agents also observed – and a Directlink representative acknowledged – that the transceiver was not operating with DFS functionality.

8. Pursuant to its Equipment Authorization, the Ubiquiti Rocket M5 transceiver is an intentional radiator, certified for use pursuant to Part 15, Subpart C of the Rules (Intentional Radiators). By operating on frequency 5630 MHz, Directlink did not comply with the equipment authorization, and, as a result, the Part 15 exception for unlicensed operation no longer applies, and a license is required under Section 301. According to Commission records, Directlink does not hold a license to operate on the center frequency of 5630 MHz in Elizabeth, Colorado. Thus, based on the evidence before us, we find that Directlink apparently willfully and repeatedly violated Section 301 of the Act and Section 15.1(b) of the Rules by operating an unlicensed radio transmitter.<sup>28</sup>

#### **B. Use of Unauthorized U-NII Device**

9. Section 15.201(b) of the Rules<sup>29</sup> provides that all intentional radiators operating under Part 15 shall be certificated by the Commission. Section 15.1(c) of the Rules<sup>30</sup> states that the operation of an intentional radiator that is not in compliance with the administrative and technical provisions in that part is prohibited. Section 302(b) of the Act provides that “[n]o person shall . . . use devices which fail to comply with the regulations promulgated pursuant to this section.”<sup>31</sup> Consequently, the operation of an intentional radiator in a manner inconsistent with the Part 15 Rules is a violation of Section 302(b) of the Act. As discussed above, the Ubiquiti Rocket M5 device used by Directlink was found operating

<sup>23</sup> See 47 C.F.R. §§ 15.1 *et seq.*

<sup>24</sup> 47 C.F.R. § 15.1(b) (emphasis added).

<sup>25</sup> See *supra* note 7.

<sup>26</sup> See *supra* note 12.

<sup>27</sup> See *supra* note 13.

<sup>28</sup> See *supra* note 14.

<sup>29</sup> 47 C.F.R. § 15.201(b).

<sup>30</sup> 47 U.S.C. § 302a(b); 47 C.F.R. § 15.1(c).

<sup>31</sup> 47 U.S.C. § 302a(b).

on a frequency not authorized under the transceiver's FCC Equipment Authorization and with no functioning DFS radar detection mechanism as required under Section 15.407(h)(2) of the Rules.<sup>32</sup> By operating in this fashion, Directlink's operations did not comply with either the device's equipment authorization or with Part 15 requirements and thus were unauthorized. Therefore, based on the evidence before us, we find that Directlink apparently willfully and repeatedly violated Section 302(b) of the Act and Section 15.1(c) of the Rules by operating its transmitter on unauthorized frequencies and doing so with the DFS functionality disabled.<sup>33</sup>

### C. Proposed Forfeiture Amount and Reporting Requirement

10. Pursuant to the Commission's *Forfeiture Policy Statement* and Section 1.80 of the Rules, the base forfeiture amount for operation without an instrument of authorization is \$10,000 and the base forfeiture amount for operation of unauthorized equipment is \$5,000.<sup>34</sup> In assessing the monetary forfeiture amount, we must also take into account the statutory factors set forth in Section 503(b)(2)(E) of the Act, which include the nature, circumstances, extent, and gravity of the violations, and with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and other such matters as justice may require.<sup>35</sup> As detailed above, Directlink operated a Ubiquiti transceiver as part of a U-NII transmission system, in violation of the transceiver's Equipment Authorization, as well as on a frequency not authorized on the transceiver's Equipment Authorization. Directlink also operated the transceiver in violation of the Part 15 Rules by not operating the transceiver with DFS functionality. Directlink's unauthorized operation of an unauthorized system created interference to the FAA's TDWR radar system at the Denver International Airport. Considering the totality of the evidence and the gravity of the public safety risks posed by the unauthorized operation, we find that an upward adjustment of \$10,000 is warranted for Directlink's operation without an authorization in apparent violation of Section 301 of the Act and Section 15.1(b) of the Rules, resulting in a proposed forfeiture of \$20,000 for this apparent violation. We propose the base forfeiture amount (\$5,000) for Directlink's operation of unauthorized equipment in apparent violation of Section 302(b) of the Act and Section 15.1(c) of the Rules. Applying the *Forfeiture Policy Statement*, Section 1.80 of the Rules, and the statutory factors to the instant case, we conclude that Directlink is apparently liable for a total forfeiture in the amount of \$25,000.

11. We further order Directlink to submit a written statement, pursuant to Section 1.16 of the Rules, signed under penalty of perjury by an officer or director of Directlink, stating that it is currently operating its U-NII systems in compliance with FCC rules and applicable authorizations. This statement must be provided to the Denver Office at the address listed in paragraph 14 within thirty (30) calendar days of the release date of this Notice of Apparent Liability for Forfeiture and Order.

## IV. ORDERING CLAUSES

12. Accordingly, **IT IS ORDERED** that, pursuant to Section 503(b) of the Communications Act of 1934, as amended, and Sections 0.111, 0.204, 0.311, 0.314, and 1.80 of the Commission's rules, Directlink LLC, is hereby **NOTIFIED** of this **APPARENT LIABILITY FOR A**

---

<sup>32</sup> 47 C.F.R. § 15.407(h)(2).

<sup>33</sup> 47 C.F.R. § 15.1(c).

<sup>34</sup> *The Commission's Forfeiture Policy Statement and Amendment of Section 1.80 of the Rules to Incorporate the Forfeiture Guidelines*, Report and Order, 12 FCC Rcd 17087 (1997) (*Forfeiture Policy Statement*), recons. denied, 15 FCC Rcd 303 (1999); 47 C.F.R. § 1.80.

<sup>35</sup> 47 U.S.C. § 503(b)(2)(E).



**FORFEITURE** in the amount of twenty-five thousand dollars (\$25,000) for violations of Sections 301 and 302(b) of the Act, and Sections 15.1(b) and 15.1(c) of the Rules.<sup>36</sup>

13. **IT IS FURTHER ORDERED** that, pursuant to Section 1.80 of the Commission's rules within thirty (30) calendar days of the release date of this Notice of Apparent Liability for Forfeiture and Order, Directlink, LLC, **SHALL PAY** the full amount of the proposed forfeiture or **SHALL FILE** a written statement seeking reduction or cancellation of the proposed forfeiture.

14. **IT IS FURTHER ORDERED** that Directlink, LLC, **SHALL SUBMIT** a written statement as described in paragraph 11, within thirty (30) calendar days of the release date of this Notice of Apparent Liability for Forfeiture and Order. The statement must be mailed to Federal Communications Commission, Enforcement Bureau, Western Region, Denver District Office, 215 S. Wadsworth Blvd., Suite 303, Lakewood, Colorado 80226. Directlink shall also e-mail the written statement to [WR-Response@fcc.gov](mailto:WR-Response@fcc.gov).

15. Payment of the forfeiture must be made by check or similar instrument, wire transfer, or credit card, and must include the NAL/Account number and FRN referenced above. Directlink shall also send electronic notification on the date said payment is made to [WR-Response@fcc.gov](mailto:WR-Response@fcc.gov). Regardless of the form of payment, a completed FCC Form 159 (Remittance Advice) must be submitted.<sup>37</sup> When completing the FCC Form 159, enter the Account Number in block number 23A (call sign/other ID) and enter the letters "FORF" in block number 24A (payment type code). Below are additional instructions you should follow based on the form of payment you select:

- Payment by check or money order must be made payable to the order of the Federal Communications Commission. Such payments (along with the completed Form 159) must be mailed to Federal Communications Commission, P.O. Box 979088, St. Louis, MO 63197-9000, or sent via overnight mail to U.S. Bank – Government Lockbox #979088, SL-MO-C2-GL, 1005 Convention Plaza, St. Louis, MO 63101.
- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. To complete the wire transfer and ensure appropriate crediting of the wired funds, a completed Form 159 must be faxed to U.S. Bank at (314) 418-4232 on the same business day the wire transfer is initiated.
- Payment by credit card must be made by providing the required credit card information on FCC Form 159 and signing and dating the Form 159 to authorize the credit card payment. The completed Form 159 must then be mailed to Federal Communications Commission, P.O. Box 979088, St. Louis, MO 63197-9000, or sent via overnight mail to U.S. Bank – Government Lockbox #979088, SL-MO-C2-GL, 1005 Convention Plaza, St. Louis, MO 63101.

16. Any request for full payment under an installment plan should be sent to: Chief Financial Officer—Financial Operations, Federal Communications Commission, 445 12th Street, S.W., Room 1-A625, Washington, D.C. 20554.<sup>38</sup> If you have questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone, 1-877-480-3201, or by e-mail, [ARINQUIRIES@fcc.gov](mailto:ARINQUIRIES@fcc.gov).

<sup>36</sup> 47 U.S.C. §§ 301, 302a(b), 503(b); 47 C.F.R. §§ 0.111, 0.204, 0.311, 0.314, 1.80, 15.1(b), 15.1(c).

<sup>37</sup> An FCC Form 159 and detailed instructions for completing the form may be obtained at <http://www.fcc.gov/Forms/Form159/159.pdf>.

<sup>38</sup> See 47 C.F.R. § 1.1914.

17. The written statement seeking reduction or cancellation of the proposed forfeiture, if any, must include a detailed factual statement supported by appropriate documentation and affidavits pursuant to Sections 1.16 and 1.80(f)(3) of the Rules.<sup>39</sup> Mail the written statement must be mailed to Federal Communications Commission, Enforcement Bureau, Western Region, Denver District Office, Office, 215 S. Wadsworth Blvd., Suite 303, Lakewood, CO 80226, and must include the NAL/Acct. No. referenced in the caption. Directlink also shall email the written response to [WR-Response@fcc.gov](mailto:WR-Response@fcc.gov).

18. The Commission will not consider reducing or canceling a forfeiture in response to a claim of inability to pay unless the petitioner submits: (1) federal tax returns for the most recent three-year period; (2) financial statements prepared according to generally accepted accounting practices (GAAP); or (3) some other reliable and objective documentation that accurately reflects the petitioner's current financial status. Any claim of inability to pay must specifically identify the basis for the claim by reference to the financial documentation submitted.

19. **IT IS FURTHER ORDERED** that a copy of this Notice of Apparent Liability for Forfeiture and Order shall be sent by both Certified Mail, Return Receipt Requested, and regular mail to Directlink, LLC, at 43217 London Drive, Parker, Colorado 80138.

**FEDERAL COMMUNICATIONS COMMISSION**

Nikki P. Shears  
District Director  
Denver Office  
Western Region  
Enforcement Bureau

---

<sup>39</sup> 47 C.F.R. §§ 1.16, 1.80(f)(3).