

(intentional radiators) may operate without an individual license.⁵ Pursuant to section 15.1(b) of the Commission's rules, however, "operation of an intentional . . . radiator that is not in accordance with the regulations in this part *must be licensed*. . . ."⁶

3. In 2003, the Commission allocated additional spectrum for unlicensed use by U-NII devices in the 5 GHz band as a means of promoting competitive wireless broadband services.⁷ In particular, some wireless Internet service providers rely U-NII devices to provide point-to-point broadband connections within their networks. U-NII device operators are authorized to operate radio transmitters in specific portions of the 5 GHz band on an unlicensed basis, but they must comply with technical rules specific to U-NII devices to prevent harmful interference to radar stations (including the FAA's terminal doppler weather radar system) operating in the same portions of the 5 GHz band in which U-NII devices are permitted to operate.⁸ To enable this spectrum sharing while avoiding harmful interference to government radar stations, the Commission requires, pursuant to section 15.407(h)(2) of its rules, that U-NII devices operating in the 5.25 – 5.35 GHz (U-NII-2A) and 5.47 – 5.725 GHz (U-NII-2C) bands have Dynamic Frequency Selection radar detection functionality, which allows them to detect the presence of radar systems and automatically avoid operating on the same channel as those nearby radar systems.⁹ Without Dynamic Frequency Selection enabled, a U-NII device operating on this shared spectrum can cause harmful interference to government radar stations.

4. As part of the Enforcement Bureau's (Bureau) ongoing coordination efforts with the FAA, on October 16, 2018, the FAA reported that its terminal doppler weather radar station serving the San Juan International Airport was receiving interference from a source to the East-Southeast of the radar station (i.e., on an azimuth of 105°- 106° True North). According to the FAA, the San Juan terminal doppler weather radar station operates on 5.610 GHz and was receiving interference from a source operating on that frequency or an adjacent frequency.

5. On November 6, 2018, Bureau personnel used direction-finding techniques and determined that radio emissions on 5.630 – 5.650 GHz were emanating from the roof of the Condominio Plaza Inmaculada II in San Juan, Puerto Rico (Transmitter Site). The Transmitter Site lies along the San Juan terminal doppler weather radar station's 105° True North azimuth. Bureau personnel then contacted the building's manager, who stated that Boom Solutions, a wireless internet service provider, leases space on the roof of Condominio Plaza Inmaculada II.

6. On December 12, 2018, a Bureau agent traveled to the corporate offices of Boom Solutions in Caguas, Puerto Rico, while other Bureau personnel stationed themselves at the Transmitter Site and monitored the emissions on 5.630 – 5.650 GHz. At Boom Solutions' corporate offices, the agent and Boom Solutions' proprietor, Carlos Alberti, observed as Boom Solutions personnel used an online management tool to remotely access two Ubiquiti PowerBeam 5AC 500 devices (one located at the Transmitter Site, and the other at a remote location) (together, the Ubiquiti Devices), whereupon the agent observed that the Ubiquiti Devices were operating on the same wireless network using a center frequency

⁵ 47 CFR §§ 15.1, *et seq.*

⁶ *See* 47 CFR § 15.1(b) (emphasis added).

⁷ *See Revision of Parts 2 and 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, Report and Order, 18 FCC Rcd 24484 (2003).

⁸ *See* 47 CFR § 15.407.

⁹ *See* 47 CFR § 15.407(h)(2).

of 5.640 GHz. The agent also observed that the Ubiquiti Devices were configured to operate without a country code and without Dynamic Frequency Selection enabled.¹⁰

7. The agent and Mr. Alberti then observed as Boom Solutions personnel reconfigured the Ubiquiti Devices to operate on a different frequency that would not interfere with the FAA's terminal doppler weather radar station. Upon reconfiguring the devices, the Bureau personnel stationed at the Transmitter Site reported that they were no longer able to measure emissions centered on 5.640 GHz at that location. Bureau personnel subsequently reviewed the user manual for the online management tool and confirmed that, based on the observed device settings, Dynamic Frequency Selection had not been enabled for either Ubiquiti Device when the devices were observed operating with a center frequency of 5.640 GHz.¹¹

8. After researching Boom Solutions using publicly available corporate databases, on February 8, 2019, a Bureau agent contacted Mr. Alberti to inquire about the relationship, if any, among Boom Solutions, CA Solutions, Inc., and Boom Net, LLC. Mr. Alberti explained that his companies provide internet-based services through a number of corporate entities, all of which do business under the umbrella name of Boom Solutions. CA Solutions, Inc., provides internet, VoIP, and IP TV services and currently operates under both the Boom Solutions and Boom TV trade names. Boom Net, LLC provides internet services to the public and operates under both the Boom Solutions and Boom Net trade names.

9. Following the February 8, 2019, conversation with Mr. Alberti, the agent also reviewed prior enforcement actions against U-NII device operators in Puerto Rico and determined that, on January 20, 2015, the Bureau issued CA Solutions, Inc. (d/b/a Boomnet) a Notice of Unlicensed Operation in connection with the company's operation of a U-NII device on 5.625 GHz without Dynamic Frequency Selection enabled.¹²

III. DISCUSSION

10. We find that Boom Solutions has apparently willfully violated section 301 of the Act and has also apparently violated sections 15.1(b) and 15.407(h)(2) of the Commission's rules.¹³ Specifically, on December 12, 2018, a Bureau agent and other Bureau personnel observed that Boom Solutions was operating the Ubiquiti Devices on 5.640 GHz (i.e., within the U-NII-2C band) that it had configured to operate without the required Dynamic Frequency Selection capability enabled. Boom Solutions' misconfiguration of the Ubiquiti Devices apparently violated section 15.407(h)(2) of the Commission's rules. Because Boom Solutions was operating the Ubiquiti Devices on 5.640 GHz without Dynamic Frequency Selection enabled, it did not satisfy the section 15.1(b) condition for unlicensed operation—namely that devices must be operated in accordance with the applicable provisions of part 15 of the Commission's rules.¹⁴ Accordingly, because Boom Solutions holds no license from the Commission permitting operation on 5.640 GHz without Dynamic Frequency Selection, we find that its operation of

¹⁰ Many U-NII device manufacturers use the country code setting as a means of automatically configuring a device to operate with the parameters applicable to that country. Thus, setting the United States country code during the initial setup of a U-NII device is often a simple way to enable Dynamic Frequency Selection.

¹¹ Boom Solutions used Ubiquiti's airOS software to manage the devices in question. According to the airOS user manual, had Dynamic Frequency Selection been active, "DFS" would have been displayed after the operating frequency. See Ubiquiti Networks, airOS 8 Operating System for Ubiquiti® airMAX® ac Series Products: User Guide, Release Version: 8, at https://dl.ubnt.com/guides/airOS/airOS_UG_V80.pdf (on file in EB-FIELDSCR-18-00028272). "DFS" was not displayed.

¹² Letter from Reuben Jusino, Resident Agent, San Juan Office, Enforcement Bureau, to CA Solutions, Inc., (d/b/a Boomnet) (Jan. 20, 2015) (on file in EB-FIELDSCR-18-00028272).

¹³ 47 U.S.C. § 301; 47 CFR §§ 15.1(b), 15.407(h)(2).

¹⁴ 47 CFR §§ 15.1(b), 15.407(h)(2).

the two Ubiquiti Devices without Dynamic Frequency Selection enabled apparently violated section 301 of the Act and sections 15.1(b) and 15.407(h)(2) of the Commission's rules.¹⁵

A. Proposed Forfeiture

11. Section 503(b) of the Act authorizes the Commission to impose a forfeiture against any entity that “willfully or repeatedly fail[s] to comply with any of the provisions of [the Act] or of any rule, regulation, or order issued by the Commission.”¹⁶ Here, section 503(b)(2)(D) of the Act authorizes us to assess a forfeiture against Boom Solutions of up to \$20,134 for each day of a continuing violation, up to a statutory maximum of \$151,005 for a single act or failure to act.¹⁷ In exercising our forfeiture authority, we must consider the “nature, circumstances, extent, and gravity of the violation and, with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and such other matters as justice may require.”¹⁸ In addition, the Commission has established forfeiture guidelines; they establish base penalties for certain violations and identify criteria that we consider when determining the appropriate penalty in any given case.¹⁹ Under these guidelines, we may adjust a forfeiture upward for violations that are egregious, intentional, or repeated, or that cause substantial harm or generate substantial economic gain for the violator.²⁰

12. Pursuant to the Commission's *Forfeiture Policy Statement* and section 1.80 of the Commission's rules, the base forfeiture amount for operation without an instrument of authorization is \$10,000.²¹ Because, on December 12, 2018, Boom Solutions apparently operated two Ubiquiti Devices on 5.640 GHz without having Dynamic Frequency Selection enabled and without a license, as required when operating outside of the parameters set forth in part 15 of the Commission's rules,²² we find that Boom Solutions' conduct resulted in two separate apparent violations of section 301 of the Act and sections 15.1(b) and 15.407(h)(2) of the Commission's rules. These two apparent violations yield an aggregate base forfeiture of \$20,000.²³

13. 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. Based on the prior warning that the Bureau issued to Boom Solutions on January 20, 2015, we conclude that Boom Solutions' apparent

¹⁵ 47 U.S.C. § 301; 47 CFR §§ 15.1(b), 15.407(h)(2).

¹⁶ 47 U.S.C. § 503(b).

¹⁷ See 47 U.S.C. § 503(b)(2)(D); 47 CFR §§ 1.80(b)(7), (9); see also *Amendment of Section 1.80(b) of the Commission's Rules, Adjustment of Civil Monetary Penalties to Reflect Inflation*, Order, 33 FCC Rcd 12278 (EB 2018).

¹⁸ 47 U.S.C. § 503(b)(2)(E).

¹⁹ 47 CFR § 1.80(b)(8), Note to paragraph (b)(8).

²⁰ *Id.*

²¹ *The Commission's Forfeiture Policy Statement and Amendment to 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 CFR § 1.80.

²² See 47 CFR § 15.1(b).

²³ See, e.g., *Towerstream Corporation, Middletown, Rhode Island*, Notice of Apparent Liability for Forfeiture and Order, 28 FCC Rcd 11604 (2013) (applying a \$10,000 base forfeiture for the unauthorized operation of a U-NII device and upwardly adjusting the proposed forfeiture to the statutory maximum because the violations were intentional, caused substantial harm to terminal doppler weather radar systems, and followed multiple prior violations), *terminated in* Order, 31 FCC Rcd 8530 (EB 2016).

violations of section 301 of the Act and sections 15.1(b) and 15.407(h)(2) were intentional and warrant an upward adjustment of \$5,000.²⁴ We therefore propose an aggregate forfeiture of \$25,000 for Boom Solutions' apparent violations of section 301 of the Act and sections 15.1(b) and 15.407(h)(2) of the Commission's rules.

B. Reporting Requirement

14. To preserve the integrity of the FAA's terminal doppler weather radar station serving the San Juan International Airport, we also find that Boom Solutions should certify its compliance with the requirements at issue in this matter. We therefore order Boom Solutions to submit a statement signed under penalty of perjury by an officer or director of the company stating that each U-NII device that it operates is currently operating in compliance with the Commission's rules and the equipment's applicable authorizations. This statement must be provided to the Enforcement Bureau at the address listed in paragraph 18 within thirty (30) calendar days of the release date hereof.

IV. CONCLUSION

15. We have determined that Boom Solutions apparently willfully violated section 301 of the Act and sections 15.1(b) and 15.407(h)(2) of the Commission's rules.²⁵ As such, Boom Solutions is apparently liable for a forfeiture of \$25,000.

V. ORDERING CLAUSES

16. Accordingly, **IT IS ORDERED** that, pursuant to section 503(b) of the Act²⁶ and section 1.80 of the Commission's rules,²⁷ CA Solutions, Inc., and Boom Net, LLC, are hereby **NOTIFIED** of their **APPARENT JOINT AND SEVERAL LIABILITY FOR A FORFEITURE** in the amount of Twenty-Five Thousand Dollars (\$25,000) for willful violations of section 301 of the Act²⁸ and sections 15.1(b) and 15.407(h)(2) of the Commission's rules.²⁹

17. **IT IS FURTHER ORDERED** that, pursuant to section 1.80 of the Commission's rules,³⁰ within thirty (30) calendar days of the release of this Notice of Apparent Liability for Forfeiture and Order, CA Solutions, Inc., and Boom Net, LLC, **SHALL PAY** the full amount of the proposed forfeiture or **SHALL FILE** a written statement seeking reduction or cancellation of the proposed forfeiture consistent with paragraph 21 below.

18. **IT IS FURTHER ORDERED** that CA Solutions, Inc., and Boom Net, LLC, **SHALL SUBMIT** a written statement, as described in paragraph 14, 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 the Federal Communications Commission, Enforcement Bureau, Office of the Field Director, 445 12th Street, SW, Washington, DC 20554, with a copy sent by email to field@fcc.gov.

19. Payment of the forfeiture must be made by credit card, ACH (Automated Clearing House) debit from a bank account using the Commission's Fee Filer (the Commission's online payment

²⁴ *Id.*

²⁵ 47 U.S.C. § 301; 47 CFR §§ 15.1(b), 15.407(h)(2).

²⁶ 47 U.S.C. § 503(b).

²⁷ 47 CFR § 1.80.

²⁸ 47 U.S.C. § 301.

²⁹ 47 CFR §§ 15.1(b), 15.407(h)(2).

³⁰ 47 CFR § 1.80.

system),³¹ or by wire transfer. The Commission no longer accepts forfeiture payments by check or money order. Below are instructions that payors should follow based on the form of payment selected:³²

- Payment by wire transfer must be made to ABA Number 021030004, receiving bank TREAS/NYC, and Account Number 27000001. A completed Form 159 must be faxed to the Federal Communications Commission at 202-418-2843 or e-mailed to RROGWireFaxes@fcc.gov on the same business day the wire transfer is initiated. Failure to provide all required information in Form 159 may result in payment not being recognized as having been received. When completing FCC Form 159, enter the Account Number in block number 23A (call sign/other ID), enter the letters “FORF” in block number 24A (payment type code), and enter in block number 11 the FRN(s) captioned above (Payor FRN).³³ For additional detail and wire transfer instructions, go to <https://www.fcc.gov/licensing-databases/fees/wire-transfer>.
- Payment by credit card must be made by using the Commission’s Fee Filer website at <https://apps.fcc.gov/FeeFiler/login.cfm>. To pay by credit card, log-in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Pay bills” on the Fee Filer Menu, and select the bill number associated with the NAL Account—the bill number is the NAL Account number with the first two digits excluded—and then choose the “Pay by Credit Card” option. Please note that there is a \$24,999.99 limit on credit card transactions.
- Payment by ACH must be made by using the Commission’s Fee Filer website at <https://apps.fcc.gov/FeeFiler/login.cfm>. To pay by ACH, log in using the FRN captioned above. If payment must be split across FRNs, complete this process for each FRN. Next, select “Pay bills” on the Fee Filer Menu and then select the bill number associated to the NAL Account—the bill number is the NAL Account number with the first two digits excluded—and choose the “Pay from Bank Account” option. Please contact the appropriate financial institution to confirm the correct Routing Number and the correct account number from which payment will be made and verify with that financial institution that the designated account has authorization to accept ACH transactions.

20. Any request for making full payment over time under an installment plan should be sent to: Chief Financial Officer—Financial Operations, Federal Communications Commission, 445 12th Street, SW, Room 1-A625, Washington, DC 20554.³⁴ Questions regarding payment procedures should be directed to the Financial Operations Group Help Desk by phone, 1-877-480-3201, or by e-mail, ARINQUIRIES@fcc.gov.

21. 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 Commission’s rules.³⁵ The written statement must be mailed to the Office of the Secretary, Federal Communications Commission, 445 12th Street, SW, Washington, DC 20554, ATTN: Enforcement Bureau—Office of the Field Director, and must include the NAL/Account Number referenced in the caption. The statement must also be e-mailed to field@fcc.gov.

³¹ Payments made using the Commission’s Fee Filer system do not require the submission of FCC Form 159.

³² For questions regarding payment procedures, please contact the Financial Operations Group Help Desk by phone at 1-877-480-3201 (option #6), or by e-mail at ARINQUIRIES@fcc.gov.

³³ Instructions for completing the form may be obtained at <https://www.fcc.gov/Forms/Form159/159.pdf>.

³⁴ See 47 CFR § 1.1914.

³⁵ 47 CFR §§ 1.16, 1.80(f)(3).

22. 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; 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.

23. **IT IS FURTHER ORDERED** that a copy of this Notice of Apparent Liability for Forfeiture and Order shall be sent by first class mail and certified mail, return receipt requested, to CA Solutions, Inc. and Boom Net LLC at Urbanización San Alfonso, A-8 Avenida Degetau, Caguas, Puerto Rico 00726.

FEDERAL COMMUNICATIONS COMMISSION

Ronald Ramage
Acting Field Director
Enforcement Bureau