



# PUBLIC NOTICE

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DA 18-581

June 5, 2018

Enforcement Advisory No. 2018-02

## FCC ENFORCEMENT ADVISORY

### **DRONE AUDIO/VIDEO TRANSMITTER ACCESSORIES MUST COMPLY WITH THE COMMISSION'S RULES TO BE MARKETED TO U.S. CUSTOMERS**

#### **OPERATORS MUST ALSO COMPLY WITH FCC RULES**

The Enforcement Bureau (Bureau) of the Federal Communications Commission (FCC) has observed a growing number of websites that advertise and sell noncompliant radio accessories, specifically audio/video transmitters (AV transmitters), intended for use with drones. Noncompliant AV transmitters are illegal, and they have the potential to interfere with public safety, aviation, and other operations by Federal agencies. Because AV transmitters are intentional radiators, retailers may not advertise or sell them, and no one may use them, unless the FCC has approved such transmitters under its equipment authorization process (or unless the devices operate *exclusively* on frequencies authorized for use only by amateur licensees). Anyone advertising or selling noncompliant AV transmitters should stop immediately, and anyone owning such devices should not use them. Violators may be subject to substantial monetary penalties.

#### **What Should You Know?**

The Bureau has observed a surge in websites advertising and selling drone AV transmitters that are not authorized in accordance with the Commission's rules.<sup>1</sup> Generally, electronic devices that intentionally emit radio waves are required to be certified by the FCC prior to advertising, sale, or use.<sup>2</sup> AV

<sup>1</sup> See *ABC Fulfillment Services LLC and Indubitably, Inc. (HobbyKing)*, Notice of Apparent Liability, FCC 18-71 (rel. June 5, 2018) (\$2.8M fine for marketing noncompliant drone AV transmitters); *Lumenier Holdco LLC, formerly known as FPV Manuals LLC*, Order and Consent Decree, 32 FCC Rcd 10291 (EB 2017) (settling investigation into noncompliant drone AV transmitters).] While this Enforcement Advisory focuses specifically on AV transmitters, any drone accessory and the drone itself must be compliant with applicable FCC radio frequency rules.

<sup>2</sup> 47 CFR §§ 2.803, 2.805, 2.907, 15.201. The equipment authorization rules apply to the manufacture, import, sale, offer for sale, shipment or use of devices capable of emitting radio frequency energy. See 47 U.S.C. § 302a(b). These rules apply to all radio frequency equipment advertised or sold to non-Federal U.S. customers regardless of

transmitters intentionally emit radio waves to transmit images or video from drone-mounted cameras back to the operator. Accordingly, these devices require FCC certification to show compliance with our rules, unless they are subject to an exception (see below).

This certification requirement ensures that equipment that intentionally emits radio waves complies with technical requirements to avoid interference with federal government operations, private licensed operations, and other equipment.<sup>3</sup> Equipment that does not comply with the technical requirements cannot be certified and thus cannot be advertised, sold, or used.<sup>4</sup>

There is an exception to this certification requirement: If a device is only capable of operating on frequencies that the FCC has allocated for use by amateur licensees, it does not require FCC equipment authorization,<sup>5</sup> and an amateur licensee may use his or her license to operate model craft (including the use of AV transmitter accessories that also transmit on such frequencies).<sup>6</sup> However, many AV transmitters that purport to operate on amateur frequencies also operate on frequencies that extend beyond the designated amateur frequency bands.<sup>7</sup> If an AV transmitter is capable of operating outside of the amateur frequency bands, it cannot be advertised, sold, or operated within the United States without an FCC equipment certification.<sup>8</sup>

Even if an AV transmitter operates solely within the amateur frequencies, the operator is required to have an amateur license to operate the device and must otherwise comply with all applicable rules.<sup>9</sup> The Bureau will take very seriously any reports of failures of drone operators to comply with all relevant rules and requirements when using devices in the amateur bands.

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the equipment's origin, including equipment manufactured overseas and imported for subsequent sale to non-Federal U.S. customers or shipped directly from overseas to non-federal U.S. customers. These rules do not apply to equipment used by Federal Government agencies. *See* 47 U.S.C. § 302a(c), 47 CFR § 2.807(d).

<sup>3</sup> 47 CFR §§ 2.907, 15.201.

<sup>4</sup> 47 CFR § 2.803(b)(1). Advertising and selling are two aspects of "marketing" under the Commission's rules. Specifically, marketing "includes [the] sale or lease, or offering for sale or lease, including advertising for sale or lease, or importation, shipment, or distribution for the purpose of selling or leasing or offering for sale or lease." 47 CFR § 2.803(a).

<sup>5</sup> *See, e.g., Pilot Travel Centers, LLC*, Notice of Apparent Liability, 19 FCC Rcd 23113, 23114 (2004) ("[R]adio transmitting equipment that transmits *solely* on Amateur Radio Service ('ARS') frequencies is not subject to equipment authorization requirements prior to manufacture or marketing.") (emphasis added).

<sup>6</sup> 47 CFR § 97.215.

<sup>7</sup> The Bureau has observed AV transmitters that apparently operate on frequencies 1010, 1040, 1080, 1120, 1160, 1200, 1320, 1360, 2370, 2470, 2490, 2510, 5645, and/or 5945 MHz, all of which are outside of the authorized amateur radio service bands. 47 CFR § 97.301(a) (listing amateur frequencies). Additionally, some drone accessories are advertised to operate at power levels higher than allowed by the Commission's rules for telecommand of model craft, which limits transmitter power to one Watt. 47 CFR § 97.215(c).

<sup>8</sup> *See, e.g., New Generation Hobbies*, Citation, 26 FCC Rcd 9468, 9471 n.23 (EB 2011) ("[W]hile amateur radio service equipment is exempt from the FCC's equipment certification requirement, it is a violation of the Commission's regulations to market in the United States a transmitter that is designed or intended to operate on frequencies outside of the authorized amateur radio service bands if such equipment has not been issued a grant of equipment certification.").

<sup>9</sup> *See, e.g.,* 47 CFR §§ 97.5, 97.113, 97.215.

### **What Happens If Manufacturers, Retailers, or Operators Do Not Comply with the FCC's Rules?**

Violators may be subject to the penalties authorized by the Communications Act, including, but not limited to, substantial monetary fines (up to \$19,639 per day of marketing violations and up to \$147,290 for an ongoing violation).<sup>10</sup>

### **What Should You Do?**

The FCC rules governing radio frequency devices and amateur operations are designed to minimize interference to all authorized spectrum users, including important government and public safety operations. Retailers and manufacturers should take the time to learn the FCC rules governing equipment authorization and comply with them. When buying drone accessories that either are electronic or have electronic components, operators should ensure that such devices or components are properly labeled as FCC-compliant.<sup>11</sup> Individuals without an amateur license may not use such radio equipment if it is designed solely for use by amateur licensees.<sup>12</sup>

### **Need more information?**

For additional information regarding equipment marketing and amateur rules, please visit the FCC website at <https://www.fcc.gov/engineering-technology/laboratory-division/general/equipment-authorization> and <https://www.fcc.gov/wireless/bureau-divisions/mobility-division/amateur-radio-service>, respectively. Media inquiries should be directed to Will Wiquist at (202) 418-0509 or [will.wiquist@fcc.gov](mailto:will.wiquist@fcc.gov).

To file a complaint, visit <https://consumercomplaints.fcc.gov> or call 1-888-CALL-FCC.

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY). You may also contact the Enforcement Bureau on its TTY line at (202) 418-1148 for further information about this Enforcement Advisory, or the FCC on its TTY line at 1-888-TELL-FCC (1-888-835-5322) for further information about the aviation radio rules.

Issued by: Chief, Enforcement Bureau

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<sup>10</sup> See 47 U.S.C. § 503(b)(2)(D); 47 CFR §§ 1.80(b)(7), (b)(9) (reflecting adjustments for inflation).

<sup>11</sup> A label indicating compliance may be located on the surface of the product, within a user-accessible non-detachable compartment (such as the battery compartment), on the packaging of the device, and/or within electronic menus if the device has an electronic display.

<sup>12</sup> Similarly, any other type of authorized equipment that requires a license should not be operated without the appropriate license.