



FEDERAL COMMUNICATIONS COMMISSION
ENFORCEMENT BUREAU
Region Two

Dallas Office
9330 LBJ Freeway, Suite 1170
Dallas, Texas, 75243

September 16, 2016

Airosurf Communications, Inc.
Edmond, Oklahoma

**NOTICE OF UNLICENSED OPERATION AND
NOTIFICATION OF HARMFUL INTERFERENCE**

Case Number: EB-FIELDSCR-16-00021995
Document Number: W201632500011

The Dallas Office, in response to information received from Station KWTW that their Terminal Doppler Weather Radar (TDWR) serving the Oklahoma City area was receiving interference on or adjacent to 5540 MHz, conducted an investigation in the area. On August 8, 2016, agents from the Dallas Office, in conjunction with the KWTW engineer, monitored radio transmissions centered on the frequency 5540 MHz in Oklahoma City, Oklahoma. These transmissions were found to be associated with a MikroTik Unlicensed National Information Infrastructure (U-NII) device owned by Airosurf. The device had FCC ID: TV7RB912G-5HPND, and was located on the Sooner Tower (35°45'32.90"N, 97°25'27.40"W). During the investigation, agents found that the device was configured in auto mode frequency band with Nicaragua as the operation country code instead of United States country code, with the Dynamic Frequency Selection (DFS) option off. When Airosurf personnel changed the operating frequency and the country code (United States), the interference to the TDWR ceased.

Radio stations must be licensed by the FCC pursuant to 47 U.S.C. § 301. The only exception to this licensing requirement is for certain transmitters using or operating at a power level or mode of operation that complies with the standards established in Part 15 of the Commission's rules. Non-licensed operation pursuant to Part 15 of the Commission's rules, however, is conditioned upon compliance with all applicable regulations in the subpart, 47 C.F.R. § 15.1(b). All intentional radiators operating pursuant to Part 15 of the FCC's rules must be certified for use as a Part 15 device, 47 C.F.R. § 15.201(b) and failure to operate such device consistent with its authorization violates Part 15 of the Commission's rules.

The MikroTik, RB912G-5HPND devices are not authorized for use in the TDWR band without DFS nor are they authorized in point-to-point operation with high gain antennas in the TDWR

operational band.¹ Accordingly, your operation of the MiKroTik, RB912G-5HPHD device on or adjacent to frequency 5540 MHz does not comply with the requirements of Part 15 of the FCC's rules and should, therefore, be licensed by the FCC. The FCC has no record of a license being issued to you to operate a transmitter on or adjacent to 5540 MHz on the Sooner Tower (35°45'32.90"N, 97°25'27.40"W). Thus, your operation was in violation of 47 U.S.C. § 301.

Non-licensed operation of a U-NII device is also subject to the condition that it must not cause harmful interference and, if harmful interference occurs, operation of the device must cease. *See* 47 C.F.R. §§ 15.5(c), 15.405. Harmful interference is defined as “[a]ny emission, radiation or induction that endangers the functioning of a radio navigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communications service.” 47 C.F.R. § 15.3(m).

You are hereby notified that your MiKroTik, RB912G-5HPHD device operating on or adjacent to 5540 MHz was causing harmful interference to the KWTV TDWR in Oklahoma City, Oklahoma and that your operation of this device must not resume until the interference can be resolved. You are also warned that operation of radio transmitting equipment without a valid radio station authorization, including non-certified equipment or modified equipment which voids the certification, and/or operation of otherwise authorized equipment that continues to cause harmful interference after your receipt of this warning, constitutes a violation of the Federal laws cited above and could subject the operator to severe penalties, including, but not limited to, substantial monetary fines, *in rem* arrest action against the offending radio equipment, and criminal sanctions including imprisonment. (*See* 47 U.S.C. §§ 401, 501, 503 and 510.)

UNLICENSED OPERATION ON OR ADJACENT TO FREQUENCY 5540 MHZ MUST NOT RESUME. NONLICENSED OPERATION OF A U-NII DEVICE MAY NOT RESUME UNLESS YOU ARE IN FULL COMPLIANCE WITH PART 15 OF THE FCC'S RULES AND UNTIL YOU RESOLVE THE HARMFUL INTERFERENCE.

You have ten (10) days from the date of this notice to respond with any evidence that your transmitter is not the source of the interference to the TDWR. Your response should describe the steps you are planning to take to eliminate future interference to the KWTV TDWR in Oklahoma City, Oklahoma. Your response should be sent to the address in the letterhead and reference the listed case and document number. Under the Privacy Act of 1974, 5 U.S.C. § 552a(e)(3), we are informing you that the Commission's staff will use all relevant material information before it to determine what, if any, enforcement action is required to ensure your compliance with FCC Rules. This will include any information that you disclose in your reply.

¹ According to its equipment authorization, FCC ID TV7RB912G-5HPND, the Mikrotik's SIA device is authorized pursuant to Section 15C of the FCC's Rules to operate only in the 5740 MHz to 5830 MHz band as an access point.

You may contact this office if you have any questions.

Ronald Ramage
Regional Director

Attachments:

Excerpts from the Communications Act of 1934, As Amended
Enforcement Bureau, "Inspection Fact Sheet", March 2005
Joint OET and EB Memo dated July 27, 2010 regarding interference to Terminal Doppler
Weather Radars